DOCUMENT RESUME

ED 192 297 CS 005 680

AUTHOR Heinrichs, Audrey S.; Rim, Eui-Do
TITLE A Survey of Classroom Practices in Reading: Reports of First, Third, Fourth, and Sixth Grade Teachers in Delaware, New Jersey, and Pennsylvania.
INSTITUTION Research for Better Schools, Inc., Philadelphia, Pa.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Feb 80
NOTE 156p.
AVAILABLE FROM Research for Better Schools, Inc., 444 North Third St., Philadelphia, PA 19123 ($10.00)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS *Classroom Techniques; Elementary Education; Grade 3; Grade 4; Grade 6; *Reading Instruction; *Reading Research; Student Behavior; *Teacher Behavior; *Teaching Styles; Time Factors (Learning)

ABSTRACT

Limited to first, third, fourth, and sixth grade teachers within the tri-state area of Delaware, New Jersey, and Pennsylvania, this survey examined (1) what teachers did when they taught reading, (2) the materials they used, (3) who made decisions about instructional processes, and (4) the bases they used. The responses are reported in terms of four classroom process constructs: "Opportunity" (encompasses variables related to the time available for students to learn curriculum content); "motivators" (covers variables that support and enhance student learning, both curriculum variables and nonacademic interaction among people in the classroom); "structure and place" (includes the clarity and specificity of curriculum objects, the frequency with which new objectives are presented, and the relationships between the curriculum materials and the stated curriculum objectives; and the placement of students into appropriate levels of the curriculum, sequencing and pacing, and grouping patterns); and "instructional events" (subsumes mechanisms and methods for connecting the learners with the feedback that is needed to implement their progress toward the desired competency). (HOD)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED192297

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

# A SURVEY OF CLASSROOM PRACTICES IN READING: REPORTS OF FIRST, THIRD, FOURTH, AND SIXTH GRADE TEACHERS IN DELAWARE, NEW JERSEY, AND PENNSYLVANIA

by
Audrey S. Heinrichs
and
Eui-Do Rim

in association
with
David C. Helms
Anna O. Graeber

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Research for Better Schools
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The Basic Skills Component
Research for Better Schools, Inc.
444 North Third Street
Philadelphia, Pennsylvania 19123

February, 1980

CS 005 680

The project presented or reported herein was performed pursuant to a grant from the National Institute of Education, Department of Health, Education, and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education, and no official endorsement by the National Institute of Education should be inferred.

TABLE OF CONTENTS


Page

I. INTRODUCTION..... 1
Development of the Survey Instrument..... 2
Procedure of the Study..... 3
Limitations of the Study..... 10
Organization of the Report..... 11

II. OPPORTUNITY..... 14
Time..... 14
Curriculum Overlap..... 24

III. MOTIVATORS..... 30

IV. STRUCTURE AND PLACEMENT..... 47
Instructional Objectives..... 47
Matching Students and Curriculum..... 57
Sequencing and Pacing..... 69
Grouping..... 75

V. INSTRUCTIONAL EVENTS..... 81

VI. ADDITIONAL FACTORS..... 84

VII. SUMMARY AND RECOMMENDATIONS..... 90

BIBLIOGRAPHY..... 98

APPENDICES
Appendix A - Reading Survey Questionnaire
Appendix B - Distribution of Questionnaires
Appendix C - Letters to Principals and Teachers
Appendix D - Commercial Texts Reported in Use
Appendix E - Standardized Tests Reported in Use
Appendix F - Tables
Appendix G - Teacher Definitions of Mastery




NOV 7 1980

# I. INTRODUCTION

In June of 1977, Research for Better Schools published A Survey of Classroom Practices in Mathematics: Reports of First, Third, Fifth, and Seventh Grade Teachers in Delaware, New Jersey, and Pennsylvania. Funded by the National Institute of Education (NIE), the Survey reported on practices used in teaching mathematics, in order

> to help those attempting to assess the impact of the forces and issues shaping elementary mathematics education as well as those who are planning programs to impact mathematics education (Graeber, Rim, & Unks, 1977, p. 1).

The Survey was greeted with a great deal of interest at that time, and a number of individuals within the three states expressed the conviction that a similar survey of classroom practices in the teaching of reading should be conducted.

Since then, national and local concern for the improvement of achievement in basic skills like mathematics and reading has risen to a new level, with states like New Jersey, Delaware, and Florida mandating minimum standards for the awarding of the high school diploma and many other states making plans to do the same (Pipho, 1978, p. 585). Important educational and fiscal directions are being legislated, but it is not always clear that hard research data are available to back them up. There are many questions: What do teachers do when they teach reading? What materials do they use? Who makes decisions about instructional processes? On what bases? To find answers to these and other questions, Research for Better Schools (RBS), funded by NIE, conducted the survey reported here.

## Development of the Survey Instrument

The questionnaire used for this survey was organized to reflect two different aspects of process-product research: (1) the body of research studies; and (2) a research model. The first pertinent aspect of process-product research was the current body of teacher-effectiveness studies. Accumulating research (Anderson, Evertson, & Brophy, 1979; Brady, Clinton, Sweeney, Peterson, & Poynor, 1977; Brophy & Evertson, 1974; Harris, Morrison, Serwer, & Gold, 1968; McDonald & Elias, 1976; Rosenshine, 1971; Stallings & Kaskowitz, 1974) indicates that certain teacher behaviors ("process") are more likely to accompany high gain scores on a standardized reading achievement test ("product") than are other teacher behaviors. The Questionnaire was designed with these findings in mind, so that practices as recorded on the questionnaires could be compared with research findings on successful techniques. These successful techniques are defined and discussed within the context of those comparisons.

The second aspect of process-product research integrated into this study was the classroom research model of Cooley and Leinhardt (1975) and Cooley and Lohnes (1976), used here to organize the questions and facilitate comparisons among the responses. The model contains four classroom process constructs (with related variables): (1) Opportunity; (2) Motivators; (3) Structure and Placement; and (4) Instructional Events. These four constructs provide titles for the chapters that make up the bulk of this report. They will be defined under "Organization of the Report" on page 11.

The original questionnaire for this survey was developed at RBS by John Dawkins, from drafts by Dr. Helen Felsenthal and with a

considerable dependence upon the RBS mathematics Survey instrument (Graeber, et al., 1977). It was reviewed within RBS and modified many times. Experts in the fields of testing and reading and in the State Departments of Education of Delaware, New Jersey, and Pennsylvania were consulted. In particular, Dr. Carolyn Massad of Educational Testing Service and Dr. Mary Seifert of the International Reading Association made helpful criticisms and comments on an early version. When relaying the questionnaire to the three state departments of Education, RBS sought not only review and comment but also information about the reading assessments needs of the individual states, for the purpose of including items relating to those needs in the questionnaire. (Only Pennsylvania requested extra items and they are reported in the State Reading Survey Report for Pennsylvania.) These suggestions, requests, and comments were incorporated into the questionnaire, and the resulting form was tried out in the field with some twenty-five teachers. Another review within RBS and an examination by the Internal Review Board for the Protection of Human Subjects of RBS completed the development of this survey instrument.

## Procedure of the Study

The survey was limited to first, third, fourth, and sixth grade teachers within the tri-state area of Delaware, New Jersey, and Pennsylvania. These grade levels were selected to represent the beginning and end of reading instructional phases in the primary (1-3) and elementary (4-6) grades. The original target sample size of 3,239 teachers was selected so that even if the return rate was as low as one-third, one thousand returns could be

expected, as is desirable in a large-scale survey. The total number of questionnaires was first apportioned over the three states according to the 1970 census figures for the total population of each state. However, since Delaware's population is only about one-fortieth the population of the three states combined, extra questionnaires were allotted to Delaware to try to ensure a reasonable number of returns from that state.

Each state sample was then stratified in five types of community categories, adapted from those used by the National Assessment of Educational Progress: metropolitan, city, suburb of metropolitan area, suburb of a city, and rural. A community of 200,000 or more inhabitants was classified as metropolitan. Communities with a population between 25,000 and 199,999 were classified as cities. Suburbs of both metropolitan areas and cities were obtained by studying a map to select communities that were adjacent to the metropolitan areas or cities. Communities with less than 25,000 inhabitants that were not adjacent to a city or metropolitan area were classified as rural. Rural communities were selected from counties that had low populations relative to the given state. The number of questionnaires allotted to each type of community was also based on census data indicating the percent of the state's inhabitants living in communities of each type. (See Appendix B for demographic data.) The questionnaires sent to a particular type of community within a state were then equally distributed among the four grade levels being sampled.

In Pennsylvania, the two metropolitan communities, Philadelphia and Pittsburgh, as well as thirty-eight of their suburbs, were sampled.

Thirty-two cities and approximately one suburb of each of the cities were included. Rural communities were selected from the twenty-six counties listed in Appendix B.

Two metropolitan communities, Jersey City and Newark, and fifty cities were identified in New Jersey. Each of the forty-four suburbs of a metropolitan area was located in one of the following counties--Bergen, Essex, Hudson, or Union. Fifty-eight distinct communities were identified as suburbs of cities and were sampled. Schools from rural areas were selected from Cape May, Hunterdon, Salem, Sussex, and Warren Counties.

Since Delaware's largest city, Wilmington, has a population of less than 200,000, no community in Delaware qualified as metropolitan or as the suburb of a metropolitan area. Wilmington was the only community classified as a city. Nine communities surrounding Wilmington were chosen to represent city suburbs. Rural communities were selected from Kent and Sussex Counties as well as from communities, not adjacent to Wilmington, in New Castle County.

Individual schools within the designated communities were designated by a systematic random sampling method from the Directory of Delaware Schools, the New Jersey Education Directory, and the Pennsylvania Education Directory. These sources, as well as the School Universe Data Book: School Year 1977-78, were used to obtain school names and addresses, names of principals, and grades within a given school building. At the beginning of the 1978-79 school year, the area around Wilmington commenced the bussing of pupils and the reassignment of teachers for the purpose of

desegregation. Because the effects of this effort are not yet measurable, demographic definitions operating previous to the desegregation effort were used.

The decision was made to reach teachers through building principals. Each school's packet of materials was addressed to the school principal. A letter to the principal provided background information about the study, requested the school's cooperation, and specified the number and grade level of teachers to whom the questionnaires should be distributed.

Attached to each individual questionnaire was a letter to the individual teacher explaining the purpose of the survey, requesting cooperation, and explaining the procedures for the return of the questionnaire. (A copy of the principal and the teacher letters may be found in Appendix C.) Each teacher received an addressed, postage-guaranteed envelope and was asked to return the questionnaire by the end of February 1979. Each questionnaire was coded with a three digit number assigned to the school. In this way, individual teachers remained anonymous, but each questionnaire could be traced to a school.

In all, 3,239 questionnaires were mailed to 804 different schools between January 2 and the middle of February 1979. One-thousand-two hundred-twenty teachers, representing 26,035 individual students, completed questionnaires adequately and sent them by the deadline for this study. (Questionnaires judged to have excessive amounts of missing data were discarded.) Responses were surprisingly evenly distributed across grade level. Of the total number of responses, 27% were returned from first

grade teachers, 26% by third, 24% by fourth, and 23% by sixth grade teachers. Responses distributed across community types favored rural areas. Of the 1,220 questionnaires returned, 14% were from metropolitan areas, 21% from city areas, 22% from suburbs of metropolitan areas, 17% from city suburbs, and 27% from rural areas. (Refer to Appendix B for more complete information.) Community responses did not vary significantly by grade level.

Characteristics of the students learned from these tri-state teachers were (estimated) socioeconomic status (SES) and reading achievement levels. An analysis of the SES of the students (Table I-1) shows that the teachers reported a preponderance of middle SES pupils. The medians of the different states were 53.2 for Delaware, 52.8 for New Jersey, and 53.9 for Pennsylvania, on a scale of 1 ("lower") to 100 ("high"). About half of the students in each state read on grade level (Table I-2), with the median for each state almost exactly on 50, again on a scale of 1 (low) to 100 (high). Very few of the teachers report having students who are very high on either the SES or the reading achievement scale. More detailed treatment of SES and reading achievement levels may be found in Chapter IV, tables IV-13 and IV-21.

Table I-1

Socioeconomic Status - Distribution of Students By State

| State | Percent of Teachers Responding | | | | | Percent Not Responding | N |
|---|---|---|---|---|---|---|---|
| | Lower | Lower Middle | Middle | Upper Middle | High | | |
| Delaware | 0.8 | 9.2 | 64.7 | 12.6 | 0.0 | 12.6 | 119 |
| New Jersey | 9.9 | 21.1 | 40.0 | 16.9 | 2.7 | 9.4 | 413 |
| Pennsylvania | 4.2 | 22.8 | 47.8 | 19.3 | 0.9 | 4.9 | 688 |

Table I-2

Reading Achievement Level - Distribution of Students by State

| State | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding | N |
|---|---|---|---|---|---|---|---|
| | Reading Achievement Levels | | | | | | |
| | More Than One Year Below Grade Level | One Year Below Grade Level | On Grade Level | One Year Above Grade Level | More Than One Year Above Grade Level | | |
| Delaware | 3.4 | 16.8 | 52.9 | 6.7 | 1.7 | 18.5 | 119 |
| New Jersey | 5.1 | 23.5 | 47.5 | 10.2 | 1.0 | 12.8 | 413 |
| Pennsylvania | 6.3 | 15.3 | 48.1 | 11.9 | 1.7 | 16.7 | 688 |

Approximately two hundred of the questionnaires that were returned in January were reviewed so that the responses to questions giving directions of "Other - please specify" could be tabulated, classified, and coded. In addition, partial lists of textbooks (Appendix D) and standardized tests (Appendix E) were developed. Once these categories and lists were prepared, all incoming questionnaires were reviewed. Each questionnaire was assigned an identification number indicating the state, type of community, school, grade, and, where necessary, whether this was the first or second questionnaire received from that school for the particular grade level. Most schools received only one questionnaire per grade level. However, in some districts, where one building had all the classes at a given grade level, schools may have received two questionnaires for a grade.

In writing this report, it was necessary to make some arbitrary decisions which affect the way one interprets the data. From time to time, the statistical tables reflect rounding errors; these should be kept in mind when viewing the tables. The designation of "significant grade level difference" meant that the difference between data for the lowest grade and for the highest grade reaches statistical significance (e.g., $p < 0.05$ or $p < 0.01$); there may or may not also be significant differences between other grade levels. Another, more difficult problem arose where a significant number of teachers chose to not respond to a question; one example is the question of how many minutes per week the students spend on inferential comprehension. In this case, there is a large difference between the number of first and the number of sixth grade teachers who responded; consequently, the grade level difference for that question reached statistical significance. The dilemma to be resolved by the authors of this report, then, became that of deciding whether teachers who did not respond, for whatever reason, should affect the level of significance reported in the tables. The resolution was that the level of significance reported would reflect differences among reporting teachers only, ignoring, for the purpose of significance level, the missing data. In most cases there was no conflict between the two analyses, but where a difference did exist, the missing data were excluded from the computation of the level of significance reported. However, the tables themselves frequently show the rate of teachers "not responding," because that rate often suggests to the reader what is of interest to teachers at different grade levels.

## Limitations of the Study

Because the teachers who participated in this survey were, to some degree, selected by building principals, one might assume that the respondents represent teachers who were viewed by their principals as being exceptional in both interest and talent as reading teachers. This bias would not have operated in schools where there was only one class per grade level, but in other schools selection by principal and by teacher willingness to answer the Questionnaire may have resulted in an optimistic view of common reading instruction practices.

In addition, this was a self-report survey. The reader will remember that these data are about what teachers say they do. The data reflect what they actually do, what they think they should do, or what they think the surveyers wanted to hear. The argument is made, however, that such self-report methods are increasingly being found to be useful and are an important source of information about what happens in the classroom (Klein, Tye, & Wright, 1979; McDonald & Elias, 1976).

An analysis of curriculum overlap as defined by this model (described below under Organization of the Report) requires a matching of curriculum-as-taught with curriculum-as-tested, to determine the congruence of input with desired output. Although teaching objectives and testing practices were both examined in the Questionnaire, the teachers were not asked to relate the two except in a rather general way, which asked them to give their opinion about the adequacy of coverage of teaching materials (Questionnaire, Appendix A, page 8).

Answers to the questions on the reading achievement levels and the socioeconomic status of the students were estimated by the teachers from their own perceptions of the meanings of those terms.

There were two other limitations of this report. One was the fact that pre- and posttest data were not collected, as is done in most process-product research. The comparisons that were made in this survey, between the teaching processes reported by these teachers and achievement test results, utilized data gathered from other research projects (and identified where used). The next limitation was that teachers either misunderstood one question (Questionnaire, #13) or were unable to go into as much detail on time allocation as the question requested. Some teachers who did respond wrote in answers that were clearly impossible, and others (76%) did not respond at all. The difficulty of recording time allocated to details of teaching was recognized; that question was dropped from the Survey report.

## Organization of the Report

There are many organizational formats in which the results of the study might have been reported. Since the majority of the questionnaire items deal with classroom processes, the responses are reported here, as much as possible, in terms of the four classroom process constructs described in the Cooley-Leinhardt/Cooley-Lohnes model: Opportunity, Motivators, Structure and Placement, and Instructional Events.

The Opportunity construct encompasses variables related to the time available for students to learn curriculum content and also to the overlap of the content that is taught and the content of the tests used. Inadequate amounts of learning time and tests which examine content other than what is taught will produce less test score gain.

The Motivators construct covers variables that support and enhance student learning, both curriculum variables and nonacademic interaction among people in the classroom. The appeal and variety of curricular materials, variation in methods of presenting academic work, and immediacy of feedback on student work are all parts of curriculum motivation. Interpersonal motivators are defined as student self-management and self-evaluation, remedial tutoring by peers, use of games, puzzles and contests, and teacher-applied praise, disapproval or lack of response.

The Structure and Placement construct includes four variables. The first concerns the clarity and specificity of curriculum objectives, the frequency with which new objectives are presented, and the relationships between the curriculum materials and the stated curriculum objectives. The second variable deals with mechanisms for initial placement of the students into appropriate levels of the curriculum, monitoring progress, and assessment of mastery; in addition, the frequency of the monitoring of student progress is examined. The third concern is with sequencing and pacing, including clarity of sequence, the question of who makes decisions on sequencing and pacing, the presence of student self-pacing, and the range of learning rates that must be taken into account. The fourth variable under Structure and Placement examines grouping patterns for instruction, their size, their basis, and the frequency of their change. Each of the above four variables relates to the degree of individualization of instruction in the belief that learning gains relate to the degree that individual student needs are met (Cooley & Leinhardt, 1975).

The Instructional Events construct subsumes mechanisms and methods for connecting the learners with the feedback that is needed to implement their progress toward the desired competency. They can be thought of as interpersonal or curricular variables. The interpersonal include management statements or cognitive statements to the whole class or to parts of the class, the less-direct teacher behaviors (than that in Motivators), and the quality of academic interactions. The curricular variable refers to the efficiency and accuracy of the assessment procedures and the effectiveness of the instructional materials in causing student responses that relate to the instructional objectives.

There is one last section in this report, on Additional Factors, in which data on various teacher characteristics and on assistance from reading specialists and other adults are discussed. It is followed by the Summary and Recommendations chapter and various appendices, as listed in the Table of Contents. For each of the three separate states, an analysis of data peculiar to that state has been completed and produced under separate cover.

## II. Opportunity

This chapter of the survey examines tri-state teacher responses to the questions under the Opportunity construct. The Opportunity to Learn expected academic material is defined as including both the time needed to learn curriculum content and the congruence of material taught and material tested (curriculum overlap). That is, the students need adequate time to study the content considered to be important material, time in accordance with their own learning rates; in addition, students need to cover the material that is to appear on the tests which evaluate their progress. These concepts may appear to be common sense, but a visit to an operating classroom will show that (1) there are great difficulties in arranging the teaching day to provide for all individual differences in time needed to learn important material, and (2) some of the tests that are frequently used to evaluate student progress, i.e., standardized tests, have a curriculum bias or are deliberately designed to test some materials that some students will not have covered. These concepts under Opportunity, then, are not at all as obvious as they seem at first. In the following discussion, various aspects of time to learn will be addressed first, followed by aspects of curriculum overlap.

### Time

Class size and attendance are two variables of time-to-learn. The number of children in a reading class is inversely related to reading achievement gain (Smith & Glass, 1979); and research shows that a good

attendance rate correlates with achievement test score gains (Kean, Summers, Raivetz, & Farber, 1979). Nationally, average reading class size has been dropping from 30 in 1963 (Austin & Morrison, 1963) to 22 in 1978 (Durkin, 1979). In the tri-state area, the median class size is also 22, with variations by state and significant differences by grade (Table II-1).

Table II-1

Reading Class Size - Median and Range,
By State and By Grade

| State | Grade Level Medians** | | | | Range |
|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | |
| Delaware | 21.8 | 23.5 | 24.6 | 26.4 | 6-36 |
| New Jersey | 20.5 | 19.3 | 21.3 | 21.0 | 2-36 |
| Pennsylvania | 21.0 | 21.3 | 22.5 | 25.0 | 3-38 (99)[1] |
| Total | 21.0 | 21.2 | 22.6 | 23.7 | 2-38 (99)[1] |

**$p < 0.01$, grade level difference

[1]In one team arrangement, the entire grade level is taught as "a reading class."

The smaller classes are in the lower grades, where the students have less capacity to regulate their own learning behavior, and the larger classes are in sixth grade, where the ability to operate in group situations is customarily more highly developed.

Attendance rates vary somewhat by state and by grade, although not necessarily as they might be expected to considering the amount of illness

that the average young child meets in early school years. The percent of first and of sixth grade teachers reporting an average daily attendance of 91%-100% is about the same and is somewhat lower than the third and fourth grades (Table II-2).

Table II-2

Percent of Reading Classes
With 91-100% Daily Attendance

| Grade | Tri-State Area | Delaware | New Jersey | Pennsylvania |
|---|---|---|---|---|
| 1 | 79.3 | 85.7 | 82.0 | 76.4 |
| 3 | 83.8 | 89.7 | 82.6 | 83.3 |
| 4 | 83.9 | 83.3 | 79.3 | 86.5 |
| 6 | 80.3 | 82.4 | 73.3 | 85.5 |

After the factors of class size and attendance rate have been taken into account, the next variable to consider is the time allocated to teaching reading. Stallings and Kaskowitz (1974) report that time spent in reading instruction has a high correlation with reading achievement. Again, this may seem like an obvious statement, but the demands made upon teaching time by other societally induced priorities (e.g., opening exercises, sex education, fire prevention week) place a severe limitation upon the teacher's freedom to decide time allocations. In the tri-state area, the average first, third, and fourth grade teachers spend about one hour each day on reading instruction, and sixth grade teachers spend about 48 minutes.

Table II-3

Time Spent on Reading Instruction

| Grade** | Median Time in Minutes Per Week | Number of Teachers Responding |
|---|---|---|
| 1 | 300.0 | 318 |
| 3 | 297.4 | 309 |
| 4 | 292.7 | 291 |
| 6 | 241.9 | 278 |
| Total | 291.3 | 1,196 |

**$p < 0.01$

The range in quartile rankings, for all teachers, is from 40 minutes per day for the first quartile to 80 minutes for the third quartile. It is unfortunate that specific recommendations cannot be made for the most efficient allocation of instructional time. Kiesling (1978) writes:

> It seems safest to conclude that the effect of additional large group instruction is approximately constant (certainly not decreasing) while small group instruction shows definite signs of having increasing effectiveness as more instruction is added (p. 577).

On the other hand, Brophy and Evertson (1974) write of the loss of test score gain accrued by teachers who continue one teaching activity too long. There is no simple formula that will dictate the appropriate length of a lesson or instructional unit. However, for the purposes of

comparison, some research reports on time allocations for both reading and language arts instruction are presented in Table II-4.

Table II-4

Research Findings: Mean Time Allocations
in Minutes per Week for Reading and Language Arts

| Subject Area | Mann (1928) | McDonald & Elias (1976) | | Brady, Clinton, Sweeney, Peterson, & Poynor (1977) | | Dishaw (1977) | |
|---|---|---|---|---|---|---|---|
| | Grade 3 | Grade 2 | Grade 5 | Grade 1 | Grade 3 | Grade 2 | Grade 5 |
| Reading | 352 | 318 | 274.5 | 529 | 422.5 | 430 | 560 |
| Language Arts | 314 | | | | | | |

One of the difficulties in answering questions about how much time is devoted to reading during the school day is that certain reading skills are taught at times other than during reading class; for instance, during science, math, or social studies. These skills are generally labeled content reading skills. One question of the survey instrument (Questionnaire, #13) inquired into time spent on teaching content reading during reading class time and also during content class time. The no-response rate was over 75% for these items, and some of the answers that were offered seemed to indicate misunderstandings of the question; so no attempt was made to interpret the data. Another question (#11) asked about time devoted to other language arts, in the belief that the language arts are mutually supportive; e.g., an excellent program in writing enhances the reading program, to the benefit of both. Table II-5 shows that the median amount of time spent on handwriting, spelling, or English was considerably less than that spent on reading (Table II-3).

Table II-5

Time Spent on Language Arts Activities

| Activity | Minutes Per Week | | |
|---|---|---|---|
| | Quartile 1 | Median | Quartile 3 |
| Handwriting | 43.0 | 74.7 | 97.5 |
| Spelling | 73.0 | 100.0 | 131.0 |
| English | 120.0 | 150.3 | 198.0 |

N=1220

The quartile rankings show that some students spend about twice as much time on language arts instruction as others. This indicates that they have considerably more opportunity to learn those skills than the others do. In Table II-6 it is shown that there is a significant grade level difference. The highest amount of time spent on handwriting and spelling is in the first grade with sixth grade the lowest. For English - "composition, listening, grammar," etc. - just the opposite is true.

Table II-6

Time Spent on Language Arts Activities By Grade Level

| Grade** | Median Time per Activity in Minutes per Week | | |
|---|---|---|---|
| | Handwriting | Spelling | English |
| 1 | 94.2 | 119.2 | 144.9 |
| 3 | 75.7 | 99.8 | 148.2 |
| 4 | 51.2 | 110.7 | 156.6 |
| 6 | 65.5 | 94.3 | 190.7 |

N=1220
**$p < 0.01$

One of the differences between time allocated to instruction and student-learning time is the amount of time lost to interruptions, discipline, and management statements, like directions for opening books to the pages for the day's work. Periods of time spent on such activities are not related to learning time and do not produce test score gains (Rosenshine & Berliner, 1978). To the extent that a great deal of time is spent on, say, discipline, the student-learning time is reduced. The amount of time per week that tri-state teachers say they spend on management activities is shown in Table II-7. On interruptions like fire drills, announcements, assemblies, etc., the average reading class loses 15 minutes each week, with a range from the 25th percentile (quartile 1) to the 75th percentile (quartile 3) of 9 to 25 minutes. Non-academic procedures like opening books and getting pencils consumes on the average 26 minutes per week, with an inter-quartile range of 15 to 48 minutes. The time lost to

Table II-7

Reading Class Time Spent on Management Activities

| Management Activities | Minutes Per Week | | |
|---|---|---|---|
| | Quartile 1 | Median | Quartile 3 |
| Interruptions (fire drills, hallway noise, etc.) | 9.0 | 15.0 | 24.9 |
| Nonacademic Procedures (How to obtain supplies, etc.) | 15.0 | 26.0 | 47.5 |
| Discipline of Students | 12.5 | 25.5 | 45.0 |

N=1220

discipline has a median of 26 minutes and quartile range of 13 to 45 minutes. The average teacher, then, loses over one hour of reading class time to management activities every week; teachers at the third quartile lose about two hours per week on these efforts. Time spent on firm disciplinary control has some correlation with reading achievement gains, particularly in low SES schools (Brophy & Evertson, 1974), but, because management time is not learning time, it would seem that a hard look at these activities should be taken by the tri-state schools. Many of these interruptions are not under the control of the teachers, and teachers can not effect changes in those. For that reason efforts to modify these time frames may need to come from the school level or even the district level, in addition to the effort that can be made by teachers at the classroom level.

One of the ways to increase the amount of time in which students are engaged in learning reading skills is to assign reading homework. Research on the degree of correlation between homework time and reading test score gains is not clear; Brophy and Evertson (1974) found that only in high SES schools was there a positive correlation; in low SES schools the correlation was low and not statistically significant. The tri-state area teachers do assign reading homework, as shown in Table II-8. The largest number of homework assignments made are in vocabulary or word study, and the second is in reading in text or story books. In each case except research projects, homework is assigned more frequently in the first grade than in the later grades (Appendix F, Table II-8a to II-8e).

Table II-8

Frequency of Assigning Reading Homework

| Reading Homework | Percent of Teachers Responding[1] | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| Reading text, story books, etc. | 13.8 | 28.9 | 17.5 | 8.4 | 19.8 | 11.5 |
| Workbooks, dittos, etc. | 8.9 | 32.5 | 14.3 | 9.3 | 22.3 | 12.8 |
| Word or vocabulary study | 19.3 | 37.0 | 15.3 | 6.3 | 12.0 | 10.0 |
| Research projects | 0.9 | 4.4 | 27.8 | 23.4 | 23.6 | 19.9 |
| Creative arts projects | 1.1 | 5.7 | 25.2 | 24.9 | 22.8 | 20.2 |

N=1220

[1]See Appendix F for significant grade level differences.

According to the Cooley-Leinhardt model, another way to increase the time that students spend engaged in learning is to increase the number of teaching adults in the room. Adults, like aides or parent volunteers, can increase the amount of time that each student has for individualized instruction. There is, however, contradictory research. McDonald and Elias (1976) found that second grade teachers used "up to six teaching adults" (p. 104), while fifth grades had more like one or two, and there was a suggestion that second graders taught entirely by their teachers showed higher test score gains than students taught by others. Although Hiatt (1979) found that the use of aides in the classroom reduced discipline problems and increased the teacher's instructional time, Kean and others (1979) found a negative correlation between the number of aides in a classroom and gain on reading achievement tests. Perhaps that was because the aides serve in rooms where the need is greatest, where the scores are lowest and the students are likely to gain less each year than other students; perhaps, in fact, that correlation shows that the aides

are serving where they can do the most good. In any case, the research has been interpreted, at times, to mean that aides cause a lessening of test score gain (Teacher, October 1979, p. 32), which is an unfortunate switch from correlation to causation.

The responses of the tri-state area, as displayed in Table II-9, indicate that this question aroused interest in the teachers by its high response rate. Teachers in the lower grades were least likely to

Table II-9

Presence of Aides or Adult Assistants in Classroom

| Grade** | Percent of Teachers Responding | | | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|---|---|
| | Hours Per Week | | | | | | | |
| | Almost 0 | 1 | 2 | 3 | 4 | 5 | More than 5 | |
| 1 | 48.5 | 5.8 | 8.3 | 5.8 | 5.2 | 8.0 | 15.0 | 3.4 |
| 3 | 66.5 | 7.0 | 7.9 | 4.1 | 2.8 | 4.7 | 5.4 | 1.6 |
| 4 | 72.5 | 7.1 | 4.7 | 3.1 | 2.0 | 3.4 | 4.0 | 3.1 |
| 6 | 74.2 | 6.0 | 6.4 | 3.9 | 1.8 | 2.1 | 2.1 | 3.5 |
| Total | 64.9 | 6.5 | 6.9 | 4.3 | 3.0 | 4.7 | 6.8 | 2.9 |

N=1220
**$p$ <0.01

have aides "almost 0" hours per week and most likely to have them "more than 5" hours. This apparently reflects the idea that individualizing instruction is more important in the lower grades than the higher ones

and is facilitated by increasing the number of teaching adults in the classroom. McDonald and Elias (1976) complete their discussion of the use of aides in the classroom by observing:

> Under the circumstances (particularly in the case of the younger pupils) the simple generalization that pupil skill-growth in reading may relate to the proportion of pupils taught exclusively by the teacher should be studied further (p. 105).

This section has discussed the opportunity that students have to learn required materials, in the sense of time spent on learning. Attendance and class size, time spent on reading and other language arts activities, time losses on management activities, assignment of homework, and the number of teaching adults in the classroom were all examined both from the standpoint of research studies and from the responses of the tri-state teachers to the questions in this Survey. Although there are few hard recommendations from the research about optimal time allocations as yet, suggestions were made about factors to consider, including grade level variations.

## Curriculum Overlap

The second part of the Opportunity construct from Cooley and Leinhardt concerns curriculum overlap. When one wishes to find out how much learning is taking place in the classroom, one may administer a test which covers the material that has been taught. That seems simple enough, but many tests used in our schools are designed to test achievement at a more

general level than what is taught in the individual classroom, and weighty decisions - whether about student or teacher - are made on the basis of these tests. A fairer form of test, imply Cooley and Leinhardt, is that which evaluates student learning by covering only what has been taught. The match between the curriculum and the test is labeled "curriculum overlap." The variables in the Questionnaire that relate to this concept asked about reading instructional materials and teacher evaluation of them, the tests and testing programs, and the match between stated objectives and tests. They will be discussed in that order in the following paragraphs.

As indicated in Table II-10, the basal reader is the major instructional resource in most of the tri-state classrooms and particularly in rural areas (Table II-11). (For a list of the basal texts used, with their publishers and the frequency of use, see Appendix D.) This finding is in accord with those of Durkin (1979), who paints a picture of unimaginative use of basal text, teacher's manual, reading workbook, and ditto sheets - endemic in American elementary schools today. Implied in her writing is the belief that a wide variety of reading materials would lessen the drabness and enhance the effectiveness of reading instruction. Inspection of Table II-10 shows that the tri-state teachers do supplement the use of the basal with a number of other teaching resources, especially reference books and story or paperback books. The skill development kits, which Durkin (1979) mentions as being dull, are used in over half of the classrooms at least once each week.

Table II-10

Reading Instruction Resources

| MATERIALS | Percent of Teachers Responding | | | Percent of Teachers Not Responding |
|---|---|---|---|---|
| | Use as major resource in teaching reading--almost daily | Use as supplementary resource--at least once a week | Use only occasionally--no more than two or three times a month | |
| Basal readers | 87.4 | 5.2 | 3.8 | 3.7 |
| Reading workbooks | 72.3 | 21.4 | 3.0 | 3.4 |
| Textbooks other than basal readers or workbooks | 10.8 | 41.5 | 32.5 | 15.2 |
| Reference books (e.g., encyclopedias, dictionaries) | 11.7 | 54.1 | 26.1 | 8.1 |
| Books other than textbooks (e.g., story books, paperbacks) | 24.4 | 51.6 | 19.0 | 4.9 |
| Newspapers, magazines, periodicals | 3.2 | 31.5 | 48.0 | 17.4 |
| Skill development kits or materials (e.g., SRA, Barnell-Loft) | 17.9 | 38.9 | 26.2 | 17.0 |
| Teacher-prepared materials (dittos, etc.) | 45.7 | 41.6 | 9.7 | 3.0 |
| Commercial dittos | 43.6 | 38.0 | 13.9 | 4.5 |

Table II-11

Percent of Teachers Using Basal Reader as Major Instructional Resource, By Region

| Region | | | | |
|---|---|---|---|---|
| Metropolitan N=175 | City N=256 | Suburb of Metro N=262 | Suburb of City N=202 | Rural N=325 |
| 89.1 | 86.7 | 82.8 | 86.1 | 91.4 |

With the amount of negative criticism leveled at basal reading texts in the past twenty years (Ashton-Warner, 1959; Durkin, 1979) for being irrelevant, dull, stereotyped, sexist, racist, suburban, and so on, it is interesting to find that a group of teachers who utilize them to the extent that these do should find them both current and trustworthy. On a five point scale, 85% described them as either "most" or "very" for "up-to-date" and 76% described them as "accurate in content."

The reading curriculum may go beyond what is customarily taught in daily reading class. Specific instruction in the reading skills of content-area subjects may be included in the curriculum and thus may be part of the content of appropriate testing instruments. The teachers of the tri-state area were asked if their students received any instruction in these skills (Questionnaire, #12); the responses appear in Table II-12.

Table II-12

Reading Instruction Taught in Content Areas

| Grade** | Percent of Teachers Responding | | | Percent of Teachers Not Responding |
|---|---|---|---|---|
| | Yes | No | I Don't Know | |
| 1 | 39.9 | 51.2 | 3.4 | 5.5 |
| 3 | 45.6 | 38.9 | 8.2 | 7.3 |
| 4 | 50.5 | 35.3 | 9.2 | 5.0 |
| 6 | 52.3 | 31.4 | 11.3 | 4.6 |
| Total | 46.8 | 39.6 | 7.9 | 5.8 |

N=1220
**$p$ <0.01

The significant grade level differences in the "Yes" column may reflect the increasing importance of content-area reading as the grades go higher. The difference in the "I don't know" column may be the result of team-teaching and subject specialization in the higher elementary grades. It may be interesting to secondary teachers that more than 50% of the sixth grade teachers say their students receive training in content-area reading skills.

One part of the "curriculum overlap" is the curriculum itself; the other part is the content of the tests which are used to assess progress in that curriculum. In Chapter IV, Structure and Placement (page 62), there is a discussion of the frequency of use of various kinds of testing, taken from the point of view that such testing maintains the appropriate placement of the students in the curriculum. Appendix E contains a list of standardized tests used by the tri-state area schools and the relative popularity of them. The most frequently selected standardized test is the California Achievement Test (24%), with the Metropolitan Achievement Tests (18%), and the Stanford Achievement Test (16%) in second and third places. More than half of the teachers report that their students are tested once each year, and another 31% twice a year. It is evident from this that the students' progress is evaluated regularly, by standardized tests. In addition, most of the teachers have sets of specified objectives for their use in making daily lesson plans, creating test items, or for other uses. In Chapter IV, pages 47 to 56, an examination of the sources of instructional objectives is made along with a survey of their use.

Therefore, we have the identity of the tests and the sources and use of various objectives; the unknown factor is the congruence of the curriculum and the content of the tests. None of the questions on the Questionnaire asked the teachers to match test items directly with curriculum content. Thus, that part of curriculum overlap is not available.

This chapter has addressed the construct called Opportunity. Both the time available to learn curriculum objectives and the amount of curriculum overlap (the match between the curriculum taught and the curriculum tested) have been discussed. Also discussed were reading instructional materials: with their variety and the opinion that the teachers have of their contemporaneity and accuracy; with instruction in content-area reading skills; with the testing program in the schools; and with the congruence between the content of the tests and the curriculum.

## III. Motivators

The construct of Motivators in the Cooley-Leinhardt model includes aspects of both the curriculum and the interpersonal relationships which support learning. The emphasis here is not upon academic aspects but on variations in presentations and attractiveness of materials, promptness of correction of work (curriculum motivators), and peer-tutoring, self-management including self-evaluation, and amounts of positive feedback and negative behavior of the teacher (interpersonal motivators). There is, in the model, a stated belief that certain of the interpersonal motivators (e.g., peer tutoring and self-management) are variables which increase student learning and thus achievement test score gains. Research has been published challenging this belief. Both the assumptions and the research will be discussed along with the findings of this survey, in the following sections.

Cooley and Leinhardt (1975) made the deliberate assumption that variety in format and the use of a number of modes of instruction are motivational. The tri-state teachers were asked how many minutes per week "the typical student" (Questionnaire, #35) devotes to certain modes of instruction; the results are summarized in Table III-1. An upper limit of 99 on the number of minutes they could indicate was imposed by the computer format; some of the teachers may have wished to indicate a higher number, but by far the large majority selected numbers below 99. Many teachers did not respond at all, whether through misunderstanding of the question, difficulty in giving detailed estimates of time, or

lack of interest in certain particular activities. It can be argued that teachers possessing a strong favorable interest in an activity would have made a response for that one.

Table III-1

Student-Time Spent on Varied Reading-Related Activities

| Activities [1] | Minutes Per Week | | Percent of Teachers Not Responding |
|---|---|---|---|
| | Median | Range | |
| Oral Reading | 5.8 | 1.0-99.0 | 7.5 |
| Discussion of Stories | 6.7 | 1.0-90.0 | 8.8 |
| Teacher Reading to Students | 6.2 | 1.0-90.0 | 13.4 |
| Choral Reading | 2.5 | 0.0-80.0 | 61.7 |
| Retelling of Stories | 3.8 | 1.0-80.0 | 33.0 |
| Independent Seatwork | 18.0 | 0.0-99.0 | 6.7 |
| Group Projects | 4.4 | 0.0-60.0 | 59.4 |
| Independent Projects | 5.7 | 1.0-48.0 | 50.5 |

N=1220

[1]Significant grade level differences are shown in Table III-2.

The Oral Reading median (5.8 minutes) seems surprisingly low, even when significant grade level differences are considered (Table III-2). Many popular reading instructional methods and basal reader series promote oral reading, whether in a round-robin fashion or for the purpose of proving a point (Stauffer, 1969). Howlett and Weintraub (1979) found that compensatory reading teachers of grades two, four, and six had their

students read aloud daily, with fourth and sixth grade teachers using pretty much the same time allotments as the first and third. The learning needs of these tri-state developmental reading classes may be quite different from those of the compensatory reading classes, but a median of less than ten minutes of oral reading per week in first grade seems marginal. Even in sixth grade many students thoroughly enjoy and benefit from reading aloud to their peers (Heinrich, 1976).

Time spent in discussing stories was found to be related to gains in achievement test scores in one study (McDonald & Elias, 1976), but

Table III-2

Minutes Per Week Students Spend on
Certain Reading-Related Activities--By Grade Level

| Activities | Grade | | | |
|---|---|---|---|---|
| | 1 | 3 | 4 | 6 |
| Oral Reading** | | | | |
| Median | 9.8 | 5.9 | 6.4 | 5.3 |
| Range | 1-50 | 1-99 | 1-99 | 1-60 |
| Discussion of Stories** | | | | |
| Median | 9.8 | 8.3 | 8.1 | 6.4 |
| Range | 1-70 | 1-90 | 1-42 | 1-40 |
| Teacher Reads to Students** | | | | |
| Median | 11.7 | 6.5 | 6.3 | 4.6 |
| Range | 1-90 | 1-72 | 1-60 | 1-30 |
| Independent Seatwork** | | | | |
| Median | 24.9 | 19.3 | 15.4 | 10.9 |
| Range | 1-99 | 2-99 | 1-99 | 2-99 |

N=1220
**$p < 0.01$

not in another (Brophy & Evertson, 1974). A tri-state student at the median point spends about 7 minutes each week in this activity. Even less time is spent on having the teacher read aloud to students, showing a trend from 11.7 minutes in first grade to 4.6 minutes in sixth. In regard to this activity Durkin (1970) writes:

> While children are still in the creeping stage of their own ability to read, the goal toward which they are working can be defined no more effectively than by a teacher who takes time to read to them from carefully chosen books. Such reading shows, in its nondidactic way, why it makes sense to learn to read (p. 230).

In Table III-1 it can be seen that over 50% of the teachers did not respond to the question of how much time their students devote to some alternative reading-related activities, and the importance of those activities to these teachers can be inferred. Independent seatwork, however, does receive a substantial rate of response and also the highest time allotment. To the degree that this seatwork is individualized according to the needs of the student and is adequately supervised, it can be expected to correlate significantly with gain in achievement test scores, and an increase in the allotted time will accompany an increase in test scores. Once again, the time claimed by the tri-state respondents seems surprisingly low at 18 minutes; 30 minutes per day would not seem out of line with normal expectations. There is no indication from the data as to why this figure is low. One can speculate that teachers are shy of admitting that they assign students to long stretches of seatwork, but it is shown in research that increases in time spent in well-selected, supervised seatwork correlates with increases in test score gains; so the hesitation to answer firmly is unfortunate, if true.

Other hints about modes of instruction preferred by these teachers can be gleaned from Table IV-18 (page 68). Given seven different possible methods for remediating learning deficits in students, teachers strongly indicated (72% assign first or second priority) that they preferred to "tutor the student" themselves, a direct instruction method which is supported by current research on teacher effectiveness. The next most popular method over all grades is "seatwork with skill development materials" and then "request professional help (e.g., from a reading specialist)." At the bottom as the least popular method is "assign independent reading," although research can be cited that shows that the amount of time spent in independent reading corresponds to gain in reading achievement test scores (Kean, et al., 1979) and thus, presumably, to skill development.

In Table III-3 one can examine the teacher responses to questions about the motivational aspects of the main curriculum resource, which, for 90% of the teachers, was a basal reader. Although there is a grade level difference, an average of 75% reported that the materials are attractive, and

Table III-3

Main Instructional Resource as Motivator

| Motivation | Percent of Teachers Reporting Satisfaction | | | |
|---|---|---|---|---|
| | Grade | | | |
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 |
| Materials are Attractive** | 83.4 | 79.7 | 73.6 | 73.2 |
| Materials are Current** | 81.9 | 78.8 | 78.0 | 76.6 |

**$p$ <0.01

an average of 80% that they are up-to-date. It is apparent from these data that the teachers view the materials as satisfactory in a motivational sense.

The use of a variety of materials for the teaching of reading was probed by the Questionnaire on the assumption that this contributed to the motivational aspects of the classroom (Cooley & Leinhardt, 1975, p. 26). In Table III-4 is shown the relative use of a number of different materials on a daily basis, with a clear grade level difference in commercial dittos and flash cards. (The Questionnaire also asked for information about less frequent use of these materials [question #19] but the resulting data were of an insignificant and uninteresting amount.) The low use of videotapes, TV, films, and filmstrips repeats the findings of Austin and Morrison (1963), who noted that enthusiasm was more widespread than use.

Table III-4

Variety of Supplemental Instructional Materials

| Materials | Percent of Teachers Responding "Almost Daily Use" | | | |
|---|---|---|---|---|
| | Grade | | | |
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 |
| Commercial Dittos** | 66.3 | 46.8 | 33.2 | 24.7 |
| Flash Cards** | 54.6 | 12.7 | 8.8 | 1.8 |
| Films/Filmstrips | 3.4 | 1.6 | 2.0 | 1.8 |
| Slides/Transparencies | 1.2 | 2.2 | 1.4 | 0.7 |
| Tapes/Records** | 14.4 | 5.1 | 4.4 | 3.2 |
| Videotapes/TV* | 2.5 | 0.3 | 0.7 | 1.1 |
| Programmed Instructional Machines | 2.1 | 2.2 | 1.0 | 1.4 |

*$p < 0.05$, grade level difference
**$p < 0.01$, grade level difference

Another interesting comparison of the use of alternative instructional materials for motivation is the use by region (Table III-5). There is a dearth of information about rural schools and the materials used in them, but the percent of teachers in the rural schools that use a variety of instructional materials seems to be little different from the percent of teachers using them in other areas.

Table III-5

Use of Variety of Supplemental Instructional Materials - By Region

| Instructional Materials | Percent of Teachers Responding,[1] By Region | | | | | No Response |
|---|---|---|---|---|---|---|
| | Metro | City | Suburb of Metro | Suburb of City | Rural | |
| Commercial Dittos | 39.2 | 39.9 | 40.1 | 42.1 | 41.4 | 4.5 |
| Flash Cards | 26.3 | 22.5 | 19.9 | 19.1 | 22.2 | 23.3 |
| Films and/or Filmstrips | 15.4 | 38.7 | 40.9 | 34.4 | 39.7 | 20.1 |
| Slides and/or Transparencies | 6.9 | 6.5 | 9.6 | 6.2 | 7.1 | 38.1 |
| Tapes and/or Records | 13.2 | 20.2 | 19.9 | 14.1 | 18.0 | 20.4 |
| Video and/or Television Tapes | 2.6 | 4.1 | 4.0 | 4.5 | 3.7 | 52.8 |
| Programmed Instructional Machines | 1.5 | 3.9 | 4.2 | 2.5 | 2.3 | 59.2 |
| Games, Puzzles, Toys | 30.9 | 27.9 | 27.1 | 25.0 | 27.7 | 16.1 |

N=1220

[1] Use at least once each week.

Another source of variety in instructional materials may come from having a school library available and utilized. Of the teachers responding to this survey, 94% had such a library; the use they make of it is displayed in Table III-6. There is variation in weekly library use

both by reading achievement level and by grade level. Evidently some teachers who have a school library available do not use it on a weekly basis. It seems that alert administrators might investigate the reasons for the limited use of this potentially valuable resource, especially for the above-average reader, who frequently needs enrichment materials.

Table III-6

Weekly Use of School Library

| Students' Reading Level | Percent of Teachers Responding | | | | Percent No Response |
|---|---|---|---|---|---|
| | Grade | | | | |
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 | |
| Below Grade Level* | 77.6 | 78.8 | 78.6 | 69.3 | 16.1 |
| On Grade Level* | 83.7 | 83.2 | 82.0 | 73.5 | 11.8 |
| Above Grade Level | 72.7 | 75.3 | 75.6 | 71.4 | 19.5 |

*$p < 0.05$, grade level difference

Cooley and Leinhardt include the promptness of correcting the student's work as one of the curriculum motivators. Teachers in the tri-state area differ significantly by grade level according to the speed with which they correct different kinds of work, and the difference can be thought of as reflecting the different demands of reading instruction as students go through the grades (Table III-7). First grade teachers promptly correct textbook work and workbooks, more than other grade

level teachers. Except on textbook work, the other teachers are more likely to use up to twenty-four hours before returning corrected work. Since first grade reading instructional objectives can be quite discrete and small, immediate feedback on work is not only possible but also highly successful as a teaching method, preventing the students from practicing mistakes instead of genuine skills. (See Rosenshine, 1978.) As the work units grow larger, with the years in school, and as the students can be expected to remember longer and more complex thoughts, the quick turn around of corrected work appears to be less possible and less needed.

Table III-7

Promptness of Correcting Student Work

| TYPE OF ASSIGNMENT | Percent of Teachers Responding | | | | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|---|---|---|
| | Speed | | | | | | | | |
| | Within a few minutes | | | | Within 24 hours | | | | |
| | Grade | | | | Grade | | | | |
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 | N=1220 |
| Classwork in textbook** | 74.8 | 56.6 | 43.4 | 42.0 | 13.4 | 33.8 | 47.1 | 39.9 | 8.0 |
| Classwork in workbook** | 50.3 | 28.8 | 25.8 | 26.5 | 44.8 | 58.0 | 58.0 | 49.8 | 5.8 |
| Homework** | 12.0 | 4.4 | 7.5 | 6.4 | 56.1 | 73.4 | 65.4 | 65.4 | 21.8 |
| Chapter/unit test** | 10.1 | 6.0 | 6.8 | 6.7 | 53.4 | 63.8 | 55.9 | 54.4 | 14.1 |
| Other projects (e.g., drama, research)** | 7.4 | 6.6 | 8.8 | 5.7 | 13.2 | 25.0 | 23.0 | 19.9 | 47.8 |

**$p < 0.01$

The discussion above included such topics as: curriculum motivators that support learning, modes of instruction, interest of the central materials, variety of materials, and speed of correction. Next in this consideration of motivational aspects of the classroom will be interpersonal factors that support learning. Self-management, self-evaluation, peer tutoring, and the use of games, puzzles, and toys will be discussed.

The concept of self-management includes student selection of activities, materials, seating, and work groups. Teacher-effectiveness studies indicate that trends toward student self-direction correlate negatively with student achievement gain, regardless of SES level (Rosenshine & Berliner, 1978). The factor of teacher attention seems crucial to learning, so that when the teacher is involved in teaching individual students or very small groups, supervision of other pupils in the classroom is more difficult and often less effective; in contrast, teacher-directed instruction of large- or whole-class groupings seems to facilitate adult supervision, and, therefore, more learning, as measured by achievement tests (Rosenshine, 1978).

In the tri-state area, 39% to 45% of the teachers tightly control the selection of instructional activities and materials, as well as student seating, allowing student selection "never" or "less than once a week." (See Table III-8.) However, more are willing to let the students choose their own seating on a daily basis than choose instructional activities or materials. Most teachers favor the practice of having students manage their own materials regularly, implying some free movement around the classroom, and 38% permit them to help one another frequently (three or more times per week) with a downward trend of using student self-management

procedures from a high in first grade to a low in sixth. Tables where those differences are displayed in greater detail are found in Appendix F, tables III-8a to III-8d.

Table III-8

Provisions for Student Self-Management

| ACTIVITIES[1] | Percent of Responding Teachers | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less than Once | Once or Twice | Three or Four Times | Five or More | |
| Students choose their own instructional activities | 18.0 | 20.8 | 34.1 | 13.8 | 9.2 | 4.2 |
| Students choose their own instructional materials | 22.5 | 21.6 | 32.0 | 11.4 | 7.5 | 5.0 |
| Students choose their own seating | 30.9 | 14.3 | 14.5 | 7.4 | 29.5 | 3.5 |
| Students manage their own in-class behavior (e.g., getting and returning materials) | 1.6 | 2.2 | 11.9 | 20.0 | 61.7 | 2.7 |
| Students do peer tutoring or help one another on assignments | 5.4 | 14.8 | 39.1 | 21.3 | 17.1 | 2.2 |

N=1220
[1]See Appendix F, tables III-8a through III-8d for significant grade level differences.

Cooley and Leinhardt (1975) specifically mention "degree of use of peer tutoring" (p. 27) as an interpersonal motivator, and 15% of the teachers selected this as their first or second priority for remediation (Table IV-18). In consideration of student self-management (Table III-8), about 78% of the teachers permit this form of instruction at

least once each week, and 38% three or more times per week. One study (Brophy & Evertson, 1974) indicates that peer tutoring is negatively correlated with reading achievement gains in grades two and three, apparently because it takes the place of direct teacher-student interaction. A certain amount of caution in using this technique seems justified, particularly in relation to the learning of the basic skills.

In terms of the students evaluating their own work, Table III-9 shows that first grade teachers are significantly less likely to be comfortable with it than sixth grade teachers, since 45% of the first grade teachers permit it less than once a week as against 15% of the sixth grade teachers.

Table III-9

Provisions for Student Self-Evaluation

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less than Once | Once or Twice | Three or Four Times | Five or More | |
| 1 N=326 | 24.2 | 20.9 | 26.1 | 12.3 | 11.7 | 4.9 |
| 3 N=316 | 11.1 | 11.1 | 32.6 | 24.1 | 18.7 | 2.5 |
| 4 N=295 | 5.1 | 9.8 | 40.7 | 27.5 | 14.9 | 2.0 |
| 6 N=283 | 4.6 | 9.9 | 44.2 | 27.2 | 12.7 | 1.4 |
| Total | 11.6 | 13.1 | 35.5 | 22.5 | 14.5 | 2.8 |

**$p < 0.01$

On the other hand, there is very little grade level difference in the percent who encourage the students to assess their own work five or more times per week (12% as against 13%). More than 50% of the third, fourth, and sixth grade teachers permit student self-evaluation between one and four times a week in contrast to 38% of the first grade teachers. In general, the responding teachers feel that they need to make decisions about instructional materials, activities, and evaluation most of the time, which restricts the use of student self-management. This finding is in accord with the teacher effectiveness studies indicating that the basic skills, at least, are best taught directly: teacher selection, teacher presentation, and teacher monitoring (Rosenshine & Berliner, 1978).

The use of games, puzzles, and toys as interpersonal motivators also varies by grade level, as one would expect. First grade teachers are many times more likely to use them than third, fourth, or sixth; only the "supplementary" use for the third or "occasional" use for the sixth grade approaches the percent of first grade teachers using them as a "major" resource (Table III-10). The amount of time spent on them (Table III-11), however, seems to contradict these expressions of popularity. If 57% of the first grade teachers spend twelve minutes or less per week on games and puzzles and only 27% use them more than twelve minutes, it is difficult to understand how they can be considered a major instructional resource by 42% of them. One possible explanation is that the teachers misunderstood the time part of this question and believed that they were specifying the number of minutes per day rather than per week. (See Table III-11.)

Table III-10

Interpersonal Motivators: Degree of Use of Games, Puzzles, Toys

| Grade** | Percent of Teachers Responding | | | Percent of Teachers Not Responding |
|---|---|---|---|---|
| | Frequency of Use as Resource | | | |
| | Major | Supplementary | Occasional | |
| 1 N=326 | 42.0 | 43.3 | 10.1 | 4.6 |
| 3 N=316 | 15.2 | 44.3 | 26.6 | 13.9 |
| 4 N=295 | 6.4 | 36.6 | 38.3 | 18.6 |
| 6 N=283 | 3.5 | 25.1 | 42.4 | 29.0 |
| Total | 17.5 | 37.7 | 28.7 | 16.1 |

**$p$ <0.01

Table III-11

Student Time Spent on Games and Puzzles

| Grade** | Percent of Teachers Responding | | Percent of Teachers Not Responding |
|---|---|---|---|
| | Minutes per Week | | |
| | Twelve or Less | More than Twelve | |
| 1 N=326 | 56.7 | 26.7 | 16.6 |
| 3 N=316 | 64.6 | 8.8 | 26.6 |
| 4 N=295 | 57.3 | 3.0 | 39.7 |
| 6 N=283 | 38.9 | 2.4 | 58.7 |
| Total | 54.8 | 11.0 | 34.5 |

**$p$ <0.01

The use of positive feedback as a motivator shows mixed results in the research. Stallings and Kaskowitz (1974) found a clear correlation between adult praise and first grade achievement gain, but the correlation was not as clear in third grade. Brophy and Evertson (1974) found that low SES students gain more on achievement test scores in reading as they receive more praise, but, for high SES students, different teacher characteristics, like being insistent and demanding, correlate with gain. The responses of the tri-state teachers to the question of how high a priority they place on certain types of feedback appear in Table III-12.

Table III-12

Interpersonal Motivators: Feedback

| Type of Feedback [1] | Percent of Teachers Responding High - Priority - Low | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | |
| I try to find work to praise (keeping the criticism to a minimum). | 35.1 | 34.8 | 10.5 | 1.7 | 0.4 | 17.5 |
| I try to indicate work that needs improvement (not overdoing the praise). | 9.7 | 26.1 | 34.0 | 5.4 | 0.6 | 24.2 |
| I give or withhold privileges, prizes, rewards, honors. | 1.2 | 4.2 | 6.6 | 16.8 | 13.4 | 57.6 |
| I let grades speak for themselves. | 3.3 | 3.8 | 5.7 | 16.6 | 14.1 | 56.3 |
| I respond according to the nature and needs of the child. | 48.3 | 19.7 | 11.9 | 2.5 | 0.7 | 17.0 |

N=1220

[1] See Appendix F, tables III-12a through III-12d for significant grade level differences.

Most teachers gave a high priority to responding "to the needs of the child," and, wherever their understanding of the needs of the child includes differentiation by SES levels, their choice is supported by

research (Medley, 1977). Most teachers did not care to respond to "give or withhold privileges . . ." or "let grades speak for themselves." About 70% of them believe that it is important "to find work to praise." There are significant grade level differences in several of these options; the differences are displayed in Appendix F, tables III-12a to III-12d.

Another question on feedback concerned rewarding children for the number of books they read. More than half of the teachers give no reward. Fourth grade teachers are more likely to display student names than teachers at other surveyed grades, and sixth grade teachers are more apt to improve grades in reading (Table III-13).

Table III-13

Feedback: Rewarding Students for Number of Books Read

| Reward | Percent of Teachers Using this Reward, by Grade Level | | | |
|---|---|---|---|---|
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 |
| No Reward | 57.7 | 53.5 | 51.2 | 50.2 |
| Yes - I Display Their Names** | 19.0 | 23.4 | 26.8 | 14.8 |
| Yes - I Improve Their Grades in Reading** | 8.3 | 14.6 | 16.9 | 27.9 |
| Yes - I Excuse Them from Other Work | 2.1 | 1.3 | 3.7 | 1.1 |
| Yes - I Give Them Special Privileges | 8.6 | 12.0 | 9.5 | 9.2 |

**$p < 0.01$

The purpose of this chapter was to present data on Motivators, those aspects of the curriculum and interpersonal behavior in the classroom which "support and encourage" student learning (Cooley, et al., 1975,

p. 25). The curriculum motivators which were considered here were: the amount and kind of variation in instructional activities and materials, the teacher's perception of student interest in the materials, and the turn-about speed of correcting student work. Interpersonal motivators discussed were: student self-management and evaluation, peer-tutoring, use of games, puzzles, and toys, and kinds of teacher feedback to students. The model assumes that these aspects of the classroom environment serve as motivators to student learning. Research findings which agreed and some which disagreed with the assumption were introduced, tri-state teacher data were presented and discussed, and the relationship of the data to the research studies was taken up.

## IV. Structure and Placement

The third major construct of the Cooley-Lohnes model, Structure and Placement, concerns the organization of program materials and the methods for placing students in and moving them through the curriculum. This chapter deals with instructional objectives: their source, availability, and presentation to students; with matching the students to the curriculum; with sequencing and pacing of students in the materials; and with grouping for reading instruction.

### Instructional Objectives

The purpose of stating instructional objectives is to guide curriculum planning, selection of materials, and evaluation. Austin and Morrison (1963) found that most teachers had lists of teaching objectives available to them, both in the manual from their basal reading series and in curriculum guides developed in their school districts. However, few teachers made use of the lists. Among the reasons that teachers gave for not using them were that they lacked specificity, did not relate to the actual reading performance of children, and did not reflect teacher thinking because the teachers themselves had not been involved in writing them. Austin and Morrison recommended that either these statements of objectives be drawn up with teacher cooperation and their use required or they be abandoned as a waste of time.

Since 1963, seventeen state legislatures and seven state boards of education have mandated competency requirements in the basic skills for high school graduation (Sally, 1979), and the specification of objectives

in the basic skills has become commonplace. Data in Table IV-1 show how the teachers in this tri-state area report using instructional objectives.

Table IV-1

Availability and Use of Reading Objectives: Tri-State Area

| Source of Reading Objectives | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Available | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| State-wide educational objectives | 25.7 | 19.0 | 16.8 | 2.6 | 8.9 | 27.0 |
| District-wide educational objectives | 9.6 | 12.9 | 41.6 | 3.4 | 16.1 | 16.4 |
| School-wide objectives | 15.1 | 7.0 | 42.7 | 2.1 | 13.4 | 19.8 |
| Teacher-developed objectives | 3.3 | 1.6 | 61.8 | 3.2 | 17.9 | 10.2 |
| Basal texts objectives | 1.2 | 5.2 | 64.3 | 3.3 | 17.6 | 8.4 |

N=1220

In terms of statewide objectives, 72% of the teachers either do not know about their availability, know that they are available but do not use them, or did not choose to answer the question. On the other hand, state-wide objectives are used for some purpose by 50% of the teachers of Delaware, 41% of the teachers of New Jersey, and 17% of the teachers in Pennsylvania (Table IV-2).

Table IV-2

State-wide Reading Objectives: Availability and Use

| State | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Available | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| Delaware N=119 | 6.7 | 17.6 | 25.2 | 6.7 | 17.6 | 26.1 |
| New Jersey N=413 | 23.2 | 11.4 | 23.7 | 3.9 | 13.5 | 24.2 |
| Pennsylvania N=687 | 30.5 | 23.8 | 11.2 | 1.2 | 4.5 | 28.8 |

There is a possible confusion inherent in the question of use of state-wide instructional objectives which may be reflected in these responses. Many states have lists of minimal objectives, so-called basic skills objectives, but there are many aspects of reading which are not included in common lists of "basics," aspects which competent teachers place high on their own lists of teaching priorities. That is, many classroom teachers may believe that they should cover what is on the state "basics" list and much more besides, and many of them probably do provide adequate coverage of the basics as well as higher reading skills. These teachers might not necessariiy respond positively to this question because they do not consciously consult their state's basic skills lists when they plan their instruction. On the other hand, those states that have made a statement of basic reading instruction objectives have done so because it was needed; they have learned that basic skills instruction can not be assumed. It would seem, therefore, that teachers would be expected to pay attention to such a statement and to plan with it in front of them. Otherwise, as Austin and Morrison (1963) point out, a great deal of someone's time and taxpayer money is being wasted.

District-wide reading instruction objectives are more common, and 61% of the region's teachers use them to plan daily lessons, to write tests, or for other purposes. Within the states, 71% of the teachers in Delaware, 64% in New Jersey, and 58% in Pennsylvania use district-wide objectives that way.

Table IV-3

District-wide Reading Objectives: Availability and Use

| State | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Available | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| Delaware N=119 | 1.7 | 11.8 | 46.2 | 6.7 | 18.4 | 15.1 |
| New Jersey N=413 | 8.7 | 9.2 | 42.1 | 4.8 | 16.8 | 18.2 |
| Pennsylvania N=687 | 11.5 | 15.3 | 40.6 | 1.9 | 15.3 | 15.6 |

From Tables IV-1, -4, -5, and -6, the reader can see the trend toward increasing importance of certain sources of objectives. The most used source for planning daily lessons is the basal text's set of objectives; only in Pennsylvania did teacher-made objectives play a larger part in daily planning. Process-product research studies of the 1970s indicate that successful teachers are instrumental in selecting instructional objectives and painstaking in monitoring student progress toward those objectives. In this Survey, 62% of the tri-state teachers used self-selected goals for their daily lesson planning, but only 3% of them used their own goals for writing tests. The question of why their own lists of objectives were not used for making tests is an interesting one. It seems that the teachers do not make reading tests; they rely on commercial tests from the basal text publishers or from testing companies. (See Table IV-16 for more information.)

Table IV-4

School-wide Reading Objectives: Availability and Use

| State | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Available | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| Delaware N=119 | 20.2 | 5.0 | 38.7 | 2.5 | 8.4 | 25.2 |
| New Jersey N=413 | 9.7 | 5.8 | 47.2 | 2.7 | 16.0 | 18.6 |
| Pennsylvania N=687 | 17.4 | 8.0 | 40.7 | 1.7 | 12.4 | 19.6 |

Table IV-5

Teacher-developed Reading Objectives: Availability and Use

| State | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Available | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| Delaware N=119 | 6.7 | 2.5 | 53.8 | 5.0 | 13.4 | 18.5 |
| New Jersey N=413 | 3.9 | 1.2 | 57.4 | 3.6 | 24.7 | 9.2 |
| Pennsylvania N=687 | 2.3 | 1.6 | 65.8 | 2.6 | 18.0 | 9.4 |

What seems to be emerging from the process-product research, however, is that teachers should keep a tight control on the objectives and on the manner that progress toward those objectives is made. One way to monitor that progress is by devising tests with the objectives from one's daily

lesson plans specifically in mind. Commercial tests (other than basal tests) seldom fit an individual teacher's set of objectives; they test some objectives that are not in the curriculum and fail to test some objectives that are. The students' success in reaching teacher-made objectives is not likely to be adequately monitored by such a general type of testing. But, evidently, the teachers in this region do not use their own selection of objectives for both planning daily instructional sessions and measuring progress.

Table IV-6

Basal Text Reading Objectives: Availability and Use

| State | Not Available | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | | Availability | | | | |
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes | |
| Delaware N=119 | 1.7 | 4.2 | 70.6 | 5.0 | 10.9 | 7.6 |
| New Jersey N=413 | 0.2 | 5.3 | 61.0 | 2.7 | 20.3 | 9.9 |
| Pennsylvania N=687 | 1.7 | 5.2 | 65.1 | 3.3 | 16.9 | 7.6 |

Reporting on their use of objectives in planning daily lessons, New Jersey and Delaware teachers of grades one, three, and four indicated this significantly more of the time than did grade six teachers. In Pennsylvania there was no significant difference by grade level. (See Table IV-7.)

Table IV-7

Teacher-Made Reading Objectives: Use in Making Daily Lesson Plans

| Grade | Percent Teachers Reporting Use | | |
|---|---|---|---|
| | Delaware* (N=119) | New Jersey** (N=413) | Pennsylvania (N=688) |
| 1 | 57.6 | 59.8 | 70.4 |
| 3 | 56.8 | 60.6 | 65.0 |
| 4 | 57.1 | 59.8 | 65.3 |
| 6 | 38.1 | 50.0 | 61.8 |
| Significance | *$p$ <0.05 | ** $p$ <0.01 | $p$ >0.10 |

The smaller use of specific objectives in the sixth grade may reflect the greater complexity of the reading task at that level and hence the greater complexity of the instructional task (McDonald & Elias, 1976). Teachers may, for instance, do weekly or monthly planning rather than daily planning with specific objectives. (See Table IV-8.) However, the demand for remedial reading instruction in secondary schools would seem to indicate that many students are missing instruction in skills which they need. Perhaps, if planning for daily reading instruction at the sixth grade level were tied more closely to objectives, there would be less need for remediation in secondary schools.

Table IV-8

Basal Text Reading Objectives: Use in Making Daily Lesson Plans

| Grade | Percent Teachers Reporting Use | | |
|---|---|---|---|
| | Delaware* (N=119) | New Jersey* (N=413) | Pennsylvania (N=688) |
| 1 | 75.8 | 65.4 | 66.7 |
| 3 | 78.4 | 74.7 | 66.7 |
| 4 | 64.3 | 59.8 | 67.6 |
| 6 | 57.1 | 45.5 | 58.6 |
| Significance | *$p$ <0.05 | *$p$ <0.05 | $p$ >0.10 |

In the process-product research referred to above, it seems clear that direct instruction is more successful than indirect methods, especially with students from low socioeconomic levels (Brophy & Evertson, 1974; McDonald & Elias, 1976; Rosenshine & Berliner, 1978). Part of the concept of direct instruction is making the instructional objectives of a lesson clear to the students. The Questionnaire asked responding teachers to indicate their use of certain techniques of making objectives clear, and Table IV-9 reports some answers. These teachers were more likely to "give an example of what is to be learned" (92%) or to "state and explain the objectives" (75%) than to "point out the objectives in the reading materials" (64%) or to depend on "the printed materials (to) make the objectives clear without my help" (39%).

Table IV-9

Techniques Used to Make Students Aware
of Objectives of Reading Lesson - By Frequency of Use

| Techniques | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Frequency | | | | |
| | Almost never use | Seldom use | Frequently use | Almost always use | |
| I point out the objectives in the reading material | 10.5 | 11.1 | 37.7 | 26.6 | 14.1 |
| I state and explain the objectives to be learned | 6.0 | 10.8 | 36.6 | 38.0 | 8.7 |
| I give an example of what is to be learned | 1.5 | 2.0 | 31.9 | 59.8 | 4.8 |
| The printed materials make the objectives clear without my help . | 14.5 | 21.5 | 26.2 | 13.2 | 24.6 |

N=1220

It seems evident that they believe in actively engaging the students' attention in reaching their instructional objectives by giving examples and by stating them rather than by relying on the printed materials to make them clear, and that practice appears to be upheld by the findings of process-product research.

There is a significant grade level variation in the directness of presentation of objectives (Table IV-10). Only two-thirds as many first grade as sixth grade teachers point out objectives "frequently" or almost always." Thirteen percent more sixth than first grade teachers state and explain objectives. The one technique used by most teachers in all grades is giving "an example of what is to be learned." Relatively few

Table IV-10

Techniques Used to Make Students
Aware of Objectives of Reading Lesson -
By Grade Level

| Techniques | Percent of Teachers Responding "Frequently Use" or "Almost Always Use" Grades** | | | |
|---|---|---|---|---|
| | 1 N=326 | 3 N=316 | 4 N=295 | 6 N=283 |
| I point out the objectives in the reading material | 51.8 | 60.8 | 71.5 | 75.2 |
| I state and explain the objectives to be learned | 66.3 | 75.6 | 76.3 | 80.9 |
| I give an example of what is to be learned | 88.3 | 92.7 | 93.5 | 92.6 |
| The printed materials make the objectives clear without my help | 38.7 | 39.0 | 38.3 | 42.1 |

**$p < 0.01$

teachers believe that the "printed materials make the objectives clear" without help. Although there is a significant grade level variation in these last two, it relates to the choice of using the techniques "frequently" as against "almost always" rather than between using the techniques or not using them. (See Appendix F, tables IV-10a to IV-10d for more data about these choices.)

## Matching Students and Curriculum

After instructional objectives are selected and appropriate teaching techniques installed, the problem of entering the students into the curriculum at levels of probable success remains. One must consider the pupils' initial abilities and knowledge and the requirements of curriculum materials. Continual monitoring procedures must be installed so that the students may progress as fast as they achieve mastery at each level. Alternative teaching approaches must be available for those students needing more opportunities than others. This section will address these topics.

In terms of initial abilities, the teachers were asked about home languages spoken by their students, about their socioeconomic status (SES), and about their reading achievement level in relation to their peers. The teachers were asked to estimate the percentage of their reading class which spoke certain languages at home, because familiarity with the English language is a readiness factor in the learning of students in American schools. The problems of bilingual pupils are receiving a great deal of attention currently, with the realization that students need to be fluent in the language of instruction. Data in Table IV-11 show that by far the large majority of students in the tri-state area speak English at home and can be expected to be fluent. Small amounts of other home languages, particularly Spanish, exist and need special consideration in some classrooms.

Table IV-11

Home Languages Spoken

| Language Spoken at Home | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Proportion of Class in Each Level | | | | |
| | 1-10% | 11-30% | 31-60% | 61-100% | |
| English | 0.2 | 1.5 | 1.1 | 96.1 | 1.1 |
| Spanish | 9.7 | 5.9 | 1.2 | 1.2 | 82.1 |
| Chinese | 3.0 | 0.5 | 0.1 | 0.0 | 96.4 |
| Vietnamese | 2.4 | 0.1 | 0.0 | 0.0 | 97.5 |
| Other | 1.7 | 1.6 | 0.2 | 0.2 | 96.3 |

N=1220

When the three states are compared, however, it is evident that there is considerable variation in the degree of the problem from state to state, and useful educational decisions, needs, and expectations will be different among the three states as a result of this distinctiveness. (See Table IV-12.) Delaware and Pennsylvania teachers indicate that virtually all of their reading classes contain 91% or more students speaking English as their native language. There is no significant grade level distinction here. In New Jersey, less than three-quarters of the teachers have classes that are 91% or more English-speaking (as a first language). Teaching a class

where the students' home languages consist of four English, eight Spanish, three Portuguese, and three Vietnamese is a different challenge entirely than teaching a class with 91% English speaking students; the curriculum, instructional methods, evaluation, and expectations may all be appropriately different in the two classes. This is an instance where regional statistics camouflage significant differences between states, differences which will be more fully explored in the Survey reports for each individual state.

Table IV-12

Students Speaking English as Home Language

| Grade | Percent of Teachers Responding: 91%-100% of Students Speak English as Home Language | | | |
|---|---|---|---|---|
| | Tri-State N=1206 | Delaware N=108 | New Jersey N=411 | Pennsylvania N=687 |
| 1 | 87.0 | 93.3 | 74.5 | 93.0 |
| 3 | 86.3 | 94.3 | 67.3 | 95.0 |
| 4 | 87.2 | 100.0 | 70.1 | 95.3 |
| 6 | 86.8 | 94.7 | 72.7 | 96.1 |
| Total | 86.8 | 95.4 | 71.3 | 94.8 |

In his description of the direct instructional model, Good (1979) differentiates among effective teaching techniques for students from

different SES levels. Without reference to intelligence scores or other semi-isolable factors, SES levels have implications for the selection of instructional methods; for example, in terms of questioning strategies and individualizing teacher attention, as reported by Medley (1977). He goes on to state that low SES students learn more with questions "sprung" on them without advance warning, questions of a low level that have a high correct-answer rate and with the teacher helping the student to find the right answer if the first attempt brings failure. Low SES students need more close attention and more individualized or small group work than do high SES students.

On the other hand, one study has concluded:

> test performance depends on the number of instructional units completed by a class, and is virtually independent of the entry and background characteristics of the class (Calfee & Drum, 1979, p. 179).

From these research findings, one may conclude that SES is a factor to be dealt with in planning instruction, but low SES pupils can be expected to pass tests on material which they have covered in school as successfully as high SES students when they have had adequate instruction.

Most tri-state teachers have a mixed group of SES levels to instruct (Table IV-13). More teachers estimated 1-20% of the class fell within each SES level than any higher proportion. Fewer responses fell within the 61-80% column than the other columns. More teachers selected middle SES levels than either above or below, as shown by the lowest "0" column rate. (Refer also to Chapter I, Table I-1.) What emerges

from this as a truism of classroom teaching is that the teachers have to deal effectively with a spread of SES levels; if they are to differentiate their teaching according to the recommendations above they must be very skillful indeed. One can hope that knowledge of and sensitivity to different SES student needs will enhance their skill.

Table IV-13

Socio-Economic Status (SES) Levels in Reading Classroom

| SES Levels | Percent of Teachers Responding[1] | | | | | |
|---|---|---|---|---|---|---|
| | Proportion of Class in Each Level | | | | | |
| | 0% | 1-20% | 21-40% | 41-60% | 61-80% | 81-100% |
| Low | 47.9 | 19.8 | 9.8 | 3.9 | 3.2 | 8.2 |
| Low-Middle | 26.4 | 24.9 | 19.9 | 9.6 | 6.0 | 5.9 |
| Middle | 21.9 | 11.2 | 16.1 | 15.0 | 13.5 | 15.0 |
| Upper-Middle | 54.9 | 18.5 | 9.1 | 4.0 | 2.8 | 3.5 |
| High | 84.5 | 6.2 | 1.0 | 0.5 | 0.2 | 0.4 |

N=1220

[1] The percent of teachers not responding is 7.2 throughout the table.

One more initial variable is the reading achievement level for each student. In order to match the student to the curriculum materials, as prescribed by Rosenshine and Berliner (1978), the teacher needs to know the achievement level of the students and the reading requirements of the materials. The teachers of the tri-state area indicate that their reading

classes are heterogeneous rather than homogeneous. A homogeneous class would have from 81% to 100% of the students reading at about the same achievement level; only 32% of the teachers indicate that their classes conform to that proportion. (See Chapter I, page 7 and Chapter IV, page 74 for further discussion of this point.) When asked to check a box on a five-point scale, evaluating the way the materials meet the needs of their students, 42% of the teachers chose the highest rank and 28% the next highest, clearly indicating satisfaction with the match between student abilities and material levels.

The bases for determining the students' reading achievement levels for assignment to reading groups varied significantly by grade. Responses made by teachers to the question of use of different means (Table IV-14) show that sixth grade teachers were most likely to use the results from standardized achievement tests and the first grade teachers to use the results of readiness tests. (This finding is so obvious and expected that one wonders what kind of readiness tests the 21% of sixth grade teachers were thinking about as they responded positively when asked about their use of those test results.) Middle grade teachers were more likely to use past teacher recommendations and criterion-referenced tests than either first or sixth grade teachers. Upper grade teachers were more likely to use reading specialist recommendations than were first grade teachers; that may be because reading specialist help is not evoked until children have passed the first opportunity to learn reading and are clearly falling behind their peers, although data in Table VI-2, page 87, do not support the supposition of a significant grade level difference. The use of the Informal Reading Inventory (IRI) is nearly uniform across grade levels, at around 54%.

Considering the amount of time that administration of the IRI takes, one wonders how frequently such teachers can make use of this form of evaluation (although the use of a group or a short-form IRI can reduce the time required).

Table IV-14

Basis for Original Assignment of Pupils to Reading Groups

| Test Results | Percent of Teachers Using These Results | | | |
|---|---|---|---|---|
| | Grade Levels | | | |
| | 1 | 3 | 4 | 6 |
| Standardized Achievement Test Results** | 31.3 | 48.4 | 53.2 | 67.1 |
| Criterion-Referenced test results (e.g., basal texts)** | 39.3 | 58.5 | 57.6 | 50.9 |
| Informal Reading Inventory results | 56.1 | 53.2 | 54.9 | 53.4 |
| Past Teacher recommendations** | 46.6 | 72.8 | 71.9 | 64.7 |
| Reading Specialist's recommendations** | 32.8 | 57.3 | 53.2 | 51.2 |
| Reading Readiness Test results** | 70.2 | 27.2 | 16.6 | 20.8 |
| Other** | 24.5 | 10.1 | 8.1 | 11.3 |

N=1220
**$p$ <0.01, grade level difference

Once the students are placed in the appropriate location in the curriculum materials, it is essential that their progress be monitored so that they may proceed at their own pace through the sequence of the curriculum. Also, because student learning gain is a measure of teacher effectiveness, and student learning gain is measured by tests, it is

essential that the chosen test reflect curriculum objectives. One part of the Questionnaire asked the teachers how often their class took which standardized reading tests and another part asked what other means they used to assess mastery. Appendix E contains detailed information about the particular standardized tests used and their popularity. The responses to the question of frequency of standardized testing are shown in Table IV-15. Generally, standardized tests were administered once a year. In some classrooms, twice-each-year testing is the rule. Grade level differences were statistically significant. Upper grades were more likely than first grade to be tested two times per year.

Table IV-15

Frequency of Use of Standardized Achievement Test

| Frequency | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Grade** | | | |
| | 1 | 3 | 4 | 6 |
| Twice each year | 15.6 | 26.6 | 22.0 | 31.1 |
| Once each year | 60.7 | 57.3 | 56.3 | 53.7 |
| Alternate years | 3.1 | 6.0 | 9.5 | 4.2 |
| Don't know | 2.8 | 1.6 | 3.1 | 2.5 |
| Other | 14.1 | 5.4 | 8.0 | 5.7 |
| No Response | 3.7 | 3.2 | 1.4 | 2.8 |

N=1220
**$p$ <0.01

Other methods of monitoring student progress are used. The teachers were asked to indicate their use of a variety of methods, and the results appear in Table IV-16. There seem to be relatively few locally developed tests, and criterion-referenced tests are used by less than one-third of the teachers. Third grade teachers are more likely to use tests from the basal than their own tests, relative to the other grades, and the use of teacher's own judgment becomes less popular as the grade level increases from first to sixth.

Table IV-16

Means of Periodic Assessment

| Means | Percent of Teachers Reporting Use | | | |
|---|---|---|---|---|
| | Grade | | | |
| | 1 | 3 | 4 | 6 |
| Test from Basal** | 87.9 | 90.8 | 86.3 | 78.8 |
| Commercial Criterion-referenced test* | 28.2 | 32.7 | 21.9 | 30.7 |
| Locally Developed test | 13.5 | 11.7 | 9.5 | 13.1 |
| Own Test** | 68.1 | 60.6 | 68.5 | 77.4 |
| Own Judgment | 79.6 | 73.7 | 68.5 | 66.4 |

N=1220
*$p < 0.05$, grade level difference
**$p < 0.01$, grade level difference

Reading groups in the tri-state area, in 1979, are reformed during the school year by 90% of the teachers, a change from the low rate of

regrouping reported by Austin and Morrison (1963). There is a grade level trend from a high of 94% in the first grade to 90% in the third and 87% in the fourth and sixth grades ($p < 0.01$). In reference to the question of what basis the teachers use for regrouping decisions, most indicate that they rely on their own judgment, although significantly more first than sixth grade teachers so indicate.

Table IV-17

Assessment Means for Regrouping Students

| Means | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Grade | | | |
| | 1 | 3 | 4 | 6 |
| Own Judgment** | 89.6 | 81.3 | 76.9 | 76.0 |
| Locally-developed Tests | 11.7 | 10.8 | 10.8 | 14.8 |
| Test that comes with Reading Materials** | 77.6 | 75.0 | 64.1 | 58.3 |
| Other Commercially Developed Test | 9.5 | 9.8 | 10.2 | 12.7 |
| Staff Consultation** | 29.4 | 36.7 | 37.6 | 45.9 |
| Reading Specialist Judgment | 42.3 | 50.0 | 48.8 | 43.8 |

N=1220
**$p < 0.01$, grade level difference

The next most popular means is the test that accompanies the basal readers, which suggests that basal reading series have a determining influence on the scope, pace, and sequence of many tri-state reading programs. Sixth grade teachers tend to use more staff consultation than lower grades, and 42% to 50% of the teachers have the help of a reading specialist available to them as they make such decisions.

Researchers have studied what levels of mastery teachers require of their students. At least for high SES students, a greater degree of mastery of new and old material seems to correlate with greater test score gains (Brophy & Evertson, 1974). This mastery should be reached before the pupils move on to succeeding skills or units. The tri-state teachers were asked about their definitions of mastery performance. It is apparent from this sample that most teachers in this area require attainment of mastery level, but there is a significant grade level difference, with the high at first grade (71%) and a downward trend to 67% in the third grade and 59% in the fourth and sixth grades ($p < 0.01$). A representative sample of their definitions of "mastery" is located in Appendix G.

When mastery tests are given, some students will be found to have passed and be ready for the next set of learning experiences, and some will be found to need corrective or remedial teaching. Brophy and Evertson (1974) found that SES plays an important part in the determination of appropriate methods for this: "In many ways, this particular set of measures typifies one of the more important differences between low and high SES schools in the kinds of teacher behavior associated with maximal student learning gains" (p. 32). In high SES schools, higher test score gains were associated with delaying a student's request for help, with encouraging the student without giving direct academic feedback, and with scolding for inability to understand. In low SES schools, higher gains were made in classes where students were helped by direct academic feedback which was given immediately upon request, rather than by scolding or encouragement, and feedback which was given by the teacher rather than by another person.

The teachers in this survey preferred the method of tutoring the student personally over all other remedial methods (Table IV-18), with a significant grade level trend from the high of first grade to the low of sixth. The next most popular one is to assign seatwork for skill development. First grade teachers also preferred the method of referring the child to an aide significantly more than did the teachers of other grades; it has been shown (Table II-8) that instructional aides are more available for reading instruction to first grade teachers than to sixth grade teachers. Tutoring by the student's peers is favored by about 15% of the teachers, although research has found a negative correlation between this and achievement gains, at least in second and third grades (Brophy & Evertson, 1974).

Table IV-18

Preferred Remediation Methods

| Methods | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Grade | | | |
| | 1 | 3 | 4 | 6 |
| I tutor the student myself.* | 79.5 | 71.8 | 70.5 | 65.4 |
| I request professional help (e.g., from a reading specialist). | 27.0 | 30.1 | 27.1 | 23.3 |
| I request help from an aide.** | 22.1 | 11.1 | 9.2 | 9.6 |
| I arrange for peer tutoring. | 14.4 | 14.2 | 17.9 | 14.9 |
| I assign homework with skill development materials.* | 21.8 | 13.9 | 17.6 | 19.5 |
| I assign seatwork with skill development materials.** | 39.6 | 49.0 | 51.2 | 50.2 |
| I assign independent reading. | 4.6 | 6.3 | 7.1 | 10.8 |

N=1220
*$p$ <0.05, grade level difference
**$p$ <0.01, grade level difference

All teachers are more likely to assign corrective skills practice as seatwork, to be done at school, than as homework. Independent reading as a remediation method is not especially popular at any grade level.

The preceding section has discussed techniques of placing the student in the curriculum. Topics included entering student abilities and knowledge, testing for assignment to groups, monitoring progress by various methods and regrouping as needed, the use and definition of the concept of mastery learning, and methods for corrective or remedial teaching to students identified as having a learning deficit. The next topic in this chapter on Structure and Placement concerns sequencing and pacing.

## Sequencing and Pacing

The variables in Sequencing and Pacing refer to the organization of curriculum materials into clear, sequential steps, the specification of the person responsible for decisions about sequencing, "presence of self-pacing" (Cooley & Leinhardt, 1975, p. 17), and the spread of learning abilities within the instructional group. These variables will be considered in the following paragraphs.

No specific evaluation was done of how clearly the steps of instruction are sequenced. Nevertheless, 76% of the teachers report that the basal reading series they are using for instruction is also used in the grade below theirs, and 72% report the same of the grade above. Referring

back to Table IV-16 will remind us that the most frequently used means of periodic assessment of student progress are the tests that go with basal texts. Assuming that the teachers wish their students to score highly on tests, an inference can be made that the instructional sequence is determined by the organization of the basal readers and, therefore, by their publishers. It behooves the people in charge of making text selections to ascertain that the scope and sequence of their chosen basal reading text suits their objectives, because the basal apparently dictates the instructional sequence.

The teachers were asked about their responsibility for instructional decisions. Approximately 25% of them do not take part in selecting basic instructional materials (Table IV-19). On page 62 it was indicated that 70% of the teachers thought that their instructional materials were appropriate for their students; the 25% above who had little part in the selection of materials may be among those who did not think highly of the suitability of materials. Certainly Austin and Morrison (1963) made a similar inference. However, when asked specifically about their role in determining goals and objectives for reading instruction, 12% of them believe that they are sole decision makers, and 54% have a share in the decision-making process. This seems to be in opposition to the effect that the scope and sequence of the basal series have been assumed to have on selection of goals and objectives. It may be true that the teachers use a basal series and its tests to a major degree in their instruction and yet insert enough of their own adaptation so that they feel that they

are in control of the way the basal objectives are realized. The other possibility, that they are not aware of the determining effect of following a basal series and its tests, seems at least as likely.

The teachers feel greater power in the selection of supplementary materials than in the choice of the basic instructional materials. The selection of supplementary materials is closely allied with the choice of instructional techniques, where the teachers feel they have the most decision-making power. The use of one teaching technique or another is very much an expression of personality, and quite often teachers make

Table IV-19

Teachers' Role in Decision-Making

| INSTRUCTIONAL DECISIONS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Sole decision-maker | Share in decision-making | My opinion is requested | I am not involved |
| Selected basic instructional materials in reading* | 6.9 | 44.8 | 24.1 | 24.2 |
| Selecting supplementary instructional materials in reading** | 27.7 | 44.4 | 17.7 | 10.2 |
| Determining goals and objectives for reading | 12.3 | 53.9 | 18.5 | 15.3 |
| Determining instructional techniques for teaching reading | 51.8 | 34.9 | 8.1 | 5.2 |
| Determining methods for placing students in reading** | 22.6 | 54.9 | 13.3 | 9.2 |
| Determining methods for assessing students' progress in reading | 30.8 | 52.9 | 8.2 | 8.2 |

*$p$ <0.05, grade level difference
**$p$ <0.01, grade level difference

their own materials, or use adaptations of supplementary materials, to enhance their special style. Another major area of teacher responsibility is in deciding how to assess student achievement for initial placement and for progress through the curriculum. (Refer to Matching Student and Curriculum, page 57, for discussion.)

Certain aspects of the decision-making role vary significantly by grade level. Table IV-20 indicates that first and sixth grade teachers have a larger sense of responsibility for selecting the basic materials of instruction than do third and fourth grade teachers. Sixth grade teachers lead the rest in their role of selecting supplementary materials, but first grade teachers have the strongest sense of selecting the method that determines the placement of students into the curriculum.

Table IV-20

Teachers' Role in Decision Making: Grade Level Analysis

| INSTRUCTIONAL DECISIONS | Percent of Teachers Reporting Sole Responsibility or Sharing of Responsibility | | | | Number Responding |
|---|---|---|---|---|---|
| | Grades | | | | |
| | 1 | 3 | 4 | 6 | |
| Selecting basic instructional materials in reading* | 53.5 | 47.5 | 45.6 | 60.6 | 1165 |
| Selecting supplementary instructional materials in reading** | 72.3 | 65.5 | 73.0 | 78.3 | 1161 |
| Determining methods for placing students in reading** | 84.7 | 74.2 | 76.2 | 73.9 | 1170 |

*$p$ <0.05, grade level difference
**$p$ <0.01, grade level difference

These findings seem to verify what is already understood about reading instruction, that teacher judgment plays a larger role in evaluating student entry level in first grade than it does in later grades, and sixth grade teachers teach many aspects of reading, e.g., content materials, which require supplements to the basal text. In addition, the range of achievement widens as the students go through the grades, so the sixth grade teacher may have more need for supplementary materials than the first grade teacher.

Another aspect of the construct of Sequencing and Pacing variables in the Cooley-Leinhardt model is student self-pacing as a means of individualizing instruction. The particular question asked in the Questionnaire about this could also be defined as student self-management, and, as such, was discussed in Chapter III, pages 39 to 42. Brophy and Evertson (1974) found indications that students were able to manage their own learning environment better at later grades than at the early grades, where "tool skills" (p. 72) lend themselves to direct instruction. It is indicated in tables of grade level differences (Appendix F, Tables III-8 a-d) that the tri-state teachers do not follow the pattern of less freedom in lower grades. First grade teachers were more likely to permit their students to choose their instructional activities more than twice a week (34%) than were sixth grade teachers (11%), and the grades divided similarly on students choosing their own materials (26% to 11%). First grade teachers stated that they allowed their students to select their seats "five or more times per week" (37%), while the percent dropped off through the other grades to 24% in sixth grade. Because there is no accompanying test score data for these

classes, it is not possible to evaluate the results of this deviation from the direction suggested by Brophy and Evertson's study.

A consideration to be remembered when planning the sequencing and pacing of instruction for any group is the range of abilities within that group. Research appears to show that low and middle achieving students make more gain when in classes of relatively more high-achieving students, at least in the fourth grade (Kean, et al., 1979) In addition, it has been found that elementary school students who are about one grade level behind their class in reading benefit more than other students from additional amounts of specifically teacher-directed instruction (Kiesling, 1978).

Data in Table IV-21 show the range of achievement levels in tri-state area reading classes, for which teachers must plan. Very few of them are truly homogeneous (81% to 100%) except the 22% on grade level. Where extremes exist, "more than one year below" and "more than one year above," the proportion of them in any class is likely to be between 1% and 20% of the students, leaving at least 80% of the students achieving closer to the grade level norm. Students that deviate one year above or below the norm are likely to constitute no more than 40% of their reading class. More teachers believe their students read below grade level than above. Over 90% of the teachers indicate that up to 20% of their reading class

Table IV-21

Reading Achievement Levels in Reading Classes

| Reading Achievement Levels | Percent of Teachers Responding[1] | | | | | |
|---|---|---|---|---|---|---|
| | Proportion of Class in Each Level | | | | | |
| | 0% | 1-20% | 21-40% | 41-60% | 61-80% | 81-100% |
| More Than One Year Below Grade Level | 46.4 | 22.4 | 7.3 | 3.0 | 1.7 | 3.7 |
| One Year Below Grade Level | 21.7 | 29.5 | 20.3 | 5.9 | 3.4 | 3.6 |
| On Grade Level | 1.1 | 7.0 | 9.1 | 19.8 | 16.8 | 21.8 |
| One Year Above Grade Level | 32.1 | 27.5 | 16.1 | 4.6 | 2.1 | 1.9 |
| More Than One Year Above Grade Level | 55.9 | 18.8 | 6.6 | 2.1 | 0.5 | 0.6 |

N=1220

[1] The percent of teachers not responding is 15.6 throughout.

reads above or below grade level. From this, the inference can be made that some degree of heterogeneity must be dealt with by almost every tri-state elementary teacher of reading, and techniques such as grouping become very important for helping the teacher place each student into the appropriate place in curriculum materials.

Grouping

Austin and Morrison (1963) found that, nationally, an average fourth grade reading class contained about thirty students. The findings of this survey are different. Reading class size in the tri-state area ranges from 2 to 38 students, with one exception of a team-teaching system that had 99 students as a reading "group." The median size of a

reading class is 22 students, and 76% of the teachers report that their median number of absentees is two-or-less students per class session, which indicates that they teach approximately 20 students on an average day. There are, however, grade level and state variations from this median. Table IV-22 shows how the size of the class grows significantly larger as the grade level goes up. In addition, it can be seen that the different states vary among themselves.

Table IV-22

Average Reading Class Size

| State | Grade** | | | | |
|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | Mean |
| Delaware | 21.8 | 23.5 | 24.6 | 26.4 | 23.8 |
| New Jersey | 20.5 | 19.3 | 21.3 | 21.0 | 20.5 |
| Pennsylvania | 21.0 | 21.3 | 22.5 | 25.6 | 22.5 |

N=1220
**$p$ <0.01

Research on grouping students for instruction indicates that small- or large-group instruction correlates positively with achievement gains, whereas instruction with one or two students has a negative correlation with class test score gains (Rosenshine & Berliner, 1978). At the same time, the effective teacher monitors individual student needs while employing group instruction and attends to those needs later in a

Table IV-21

Reading Achievement Levels in Reading Classes

| Reading Achievement Levels | Percent of Teachers Responding[1] | | | | | |
|---|---|---|---|---|---|---|
| | Proportion of Class in Each Level | | | | | |
| | 0% | 1-20% | 21-40% | 41-60% | 61-80% | 81-100% |
| More Than One Year Below Grade Level | 46.4 | 22.4 | 7.3 | 3.0 | 1.7 | 3.7 |
| One Year Below Grade Level | 21.7 | 29.5 | 20.3 | 5.9 | 3.4 | 3.6 |
| On Grade Level | 1.1 | 7.0 | 9.1 | 19.8 | 16.8 | 21.8 |
| One Year Above Grade Level | 32.1 | 27.5 | 16.1 | 4.6 | 2.1 | 1.9 |
| More Than One Year Above Grade Level | 55.9 | 18.8 | 6.6 | 2.1 | 0.5 | 0.6 |

N=1220

[1] The percent of teachers not responding is 15.6 throughout.

reads above or below grade level. From this, the inference can be made that some degree of heterogeneity must be dealt with by almost every tri-state elementary teacher of reading, and techniques such as grouping become very important for helping the teacher place each student into the appropriate place in curriculum materials.

## Grouping

Austin and Morrison (1963) found that, nationally, an average fourth grade reading class contained about thirty students. The findings of this survey are different. Reading class size in the tri-state area ranges from 2 to 38 students, with one exception of a team-teaching system that had 99 students as a reading "group." The median size of a

reading class is 22 students, and 76% of the teachers report that their median number of absentees is two-or-less students per class session, which indicates that they teach approximately 20 students on an average day. There are, however, grade level and state variations from this median. Table IV-22 shows how the size of the class grows significantly larger as the grade level goes up. In addition, it can be seen that the different states vary among themselves.

Table IV-22

| State | Average Reading Class Size | | | | |
|---|---|---|---|---|---|
| | Grade** | | | | |
| | 1 | 3 | 4 | 6 | Mean |
| Delaware | 21.8 | 23.5 | 24.6 | 26.4 | 23.8 |
| New Jersey | 20.5 | 19.3 | 21.3 | 21.0 | 20.5 |
| Pennsylvania | 21.0 | 21.3 | 22.5 | 25.6 | 22.5 |

N=1220
**$p$ <0.01

Research on grouping students for instruction indicates that small- or large-group instruction correlates positively with achievement gains, whereas instruction with one or two students has a negative correlation with class test score gains (Rosenshine & Berliner, 1978). At the same time, the effective teacher monitors individual student needs while employing group instruction and attends to those needs later in a

one- or two-pupil grouping arrangement (Brophy, et al., 1974; Kean, et al., 1979; Stallings, et al., 1974), ensuring that individual needs do not get lost in the larger groups. It is becoming apparent that teacher effectiveness is enhanced when only a limited number of different activities is taking place in the classroom concurrently, probably because of the greater chance of adequate monitoring of student engagement in learning.

Some of the patterns of grouping for reading instruction popular in the tri-state area appear in Table IV-23. With a range of class size from 2 to 38 pupils, it is not surprising that the patterns varied. Very few teachers divide their teaching time equally into four different grouping types (2%). In terms of grouping decisions, independent work (25%) and medium-sized groups (23%) are favored over whole class (18%) and small-group work (19%). Considering a median class size of 22, this seems to fit the pattern found by Austin and Morrison (1963) of three reading groups and independent seatwork as a nationwide commonplace for reading instruction. One-third of the teachers spend "almost all" of their instructional time using only one form of grouping; almost 40% prefer to spend half of the class time in one grouping arrangement and the rest of the class time in other arrangements. (Regrouping practices were discussed on pages 63 and 64 in connection with the use of monitoring procedures.)

The "Other" of Table IV-23 represents responses that added up to less than or more than a whole (e.g., 3/4 time in whole group and 1/2 time in independent work); the decision was made that interpreting these data would be difficult and the results unreliable.

Table IV-23

Grouping of Students for Reading Instruction

| GROUPINGS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Approximate Portion of Time per Reading Period | | | |
| | About 1/2 [1] | About 3/4 | Almost all | Other |
| Whole class (more than 15 students) | 7.9 | 2.6 | 7.0 | |
| Medium size groups (8-15 students) | 11.9 | 3.5 | 7.8 | |
| Small groups (3-7 students) | 5.7 | 3.1 | 10.5 | |
| Individuals working independently | 14.3 | 2.8 | 8.1 | |
| Divided equally 4 ways | | | | 2.0 |
| Other | | | | 24.9 |

N=1220

[1]There is a small overlap among half-time groupings, e.g., a teacher may use 1/2 of the reading period with small groups and 1/2 with whole class instruction; that teacher will be counted in both rows, under "About 1/2."

A recommendation, from research, that could be made on the basis of the findings in Table IV-23 is that those teachers spending half of their time or more in independent work and small group work consider investing larger amounts of time in larger groupings if they wish to increase student gains on achievement test scores (Good, 1979).

Grade level patterns (Table IV-24) show that the most popular arrangement for first grade teachers was small group and then independent work; for third grade, medium-sized groups and then independent work; for

fourth grade, independent and then medium-sized groups; and, for sixth grade, independent work and then whole class.

The first and third grade teachers plan small or medium-sized groups as their first choice; for second choice they have their students work independently. In contrast, the fourth and sixth grade teachers make greatest use of independent working time and then use medium or large groups for the rest of their instructional time. These patterns may exemplify the increasing spread of abilities and needs in students as they progress through school and their teachers' recognition of that divergence by reliance on independent seatwork. In addition, recognition of the students' increasing ability to manage their own time and behavior seems implicit, both in the greater use of independent work and in the ever-larger grouping arrangements for instruction of students, as they mature. (For more detailed tables on grade level differences, see Appendix F, Tables IV-23a to IV-23d.)

Table IV-24

Grouping of Students for Reading Instruction: First and Second Choices, By Grade Level

| Groupings | Grade | | | |
|---|---|---|---|---|
| | First | Third | Fourth | Sixth |
| Whole class (more than 15 students) | | | | 2 |
| Medium size groups (8-15 students) | | 1 | 2 | |
| Small groups (3-7 students) | 1 | | | |
| Individuals working independently | 2 | 2 | 1 | 1 |

This chapter on Structure and Placement has discussed Instructional Objectives: their specificity, availability, and presentation to students; aspects of matching the students to appropriate levels of the curriculum - their initial abilities, teacher satisfaction with the manner in which the major curriculum resources fit the needs of the students, basis of assigning students to groups at the beginning of the year, provisions for monitoring student progress toward mastery, definition and assessment of mastery, and remediation arrangements; Sequencing and Pacing - the clarity with which they are spelled out, who decides them, the possibility of student self-pacing and the range of learning rates to be accommodated in the classroom; and Grouping - the size of the class and attendance, the size of reading groups, the amount of time that different grouping patterns are maintained, and the frequency of changing students' group assignments in relation to their changing needs.

## V. Instructional Events

The construct named Instructional Events encompasses all variables that bring together the learner and feedback: processes, activities, and devices which cause learners to proceed toward learning objectives with effectiveness and efficiency (Cooley & Leinhardt, 1975). These variables are considered either interpersonal or curricular, and they relate to the frequency of or the degree to which the variables happen. They are most frequently assessed by direct observation or observation of videotapes of classroom action. This reading survey did not employ either video or observational assessment techniques, and, as a result, the amount of information gathered under this construct is limited.

It is possible to infer certain aspects of management information from some of the questions, however. Management statements are considered to be interpersonal and are evaluated as to their "content, affect, and clarity" (Cooley, et al., 1975, p. 18). They concern both practical matters, like oral directions for obtaining paper to write on, and cognitive exchanges like the pursuit of a line of questioning to deepen a student's inferential comprehension of a reading passage.

In terms of practical management statements, the teachers were asked how much of their reading class time was lost to interruptions, to non-academic directions, and to discipline. In Chapter II there is an extensive discussion of the time lost to these activities, and the details reported by the teachers are shown in Table II-7. It was noted that, during a normal week, the average tri-state teacher loses over one hour of reading

class time in attending to management problems, and that teachers at the third quartile (75th percentile) lose more than two hours per week of reading class time. The reader is referred to Chapter II, page 20, for more information on this issue.

Cognitive management statements are those which directly engage the students in reaching an instructional goal. One aspect of this process lies in making instructional objectives clear to the students. Teacher responses to questions of this type are discussed at length in Chapter IV, beginning on page 54. These responses are displayed in Tables IV-9 and IV-10, showing that the tri-state teachers are more likely to "give an example of what is to be learned" than to "point out the objectives" or "state and explain the objectives." One of the tenets of direct instruction is that "goals are clear to students" (Rosenshine & Berliner, 1978, p. 7), and, at least in terms of learning basic skills, direct teaching of instructional objectives appears to be more successful than indirect teaching. This is especially true with younger children (Brophy & Evertson, 1974). In contrast to that, the tri-state children are less likely to receive direct statements of learning goals in first grade than they are in sixth (Table IV-10). In addition, Durkin (1979) found that teachers are more likely to be "mentioners" (p. 523) of an instructional goal, after which they assign seatwork to practice what was mentioned, than they are to teach a lesson to the point where the students have a thorough mastery of it. It seems possible that an emphasis on more direct statements of teaching objectives would be valuable in the tri-state classrooms, particularly in the lower grades.

This chapter has briefly discussed Instructional Events in terms of management statements, both practical and cognitive. In each case relevant research was cited and reference to other parts of this Survey was made for fuller coverage of the available data, since the data were discussed under different constructs of the Cooley-Leinhardt model.

## VI. Additional Factors

Certain of the questions on the Survey instrument that are related to reading instruction did not seem to fit naturally into any of the Cooley-Leinhardt constructs. These include: demands on teacher-time in the sense of subjects other than reading taught by these teachers; the background of the teachers, in the sense of the languages they speak and how that relates to home languages spoken by the students; and help from the reading specialist (not including a remedial reading teacher), e.g., its availability, frequency, and type.

One of the variables that would modify the amount of time that teachers can spend preparing themselves for reading instruction is the number of other subjects that they are required to teach. A look at Table VI-1 makes clear the immense task that we place on first grade teachers who are required to teach many subjects in addition to their primary - reading - responsibility. As content and teaching methodologies become more specific to subject area, with higher grade levels, teachers are less often required to teach everything. In the sixth grade, 11% of the teachers teach no subjects besides reading; one may assume that these are roughly the same people as the 11.3% who do not know whether their students receive reading instruction in content areas other than during reading class time (Chapter II, Table II-12). The debate about advantages and disadvantages of subject specialization in the elementary grades and its attendant team-teaching structure is still a lively one and cannot be settled here.

Table VI-1

Reading Teachers Responsible for Instruction in Other Subjects

| Grade** | Percent of Teachers Responding | | | | |
|---|---|---|---|---|---|
| | Content Area | | | | |
| | Language Arts | Social Studies | Mathematics | Science | None Besides Reading |
| 1 | 96.3 | 93.3 | 96.6 | 89.3 | 0.6 |
| 3 | 94.9 | 91.1 | 95.6 | 87.0 | 0.9 |
| 4 | 91.9 | 84.7 | 84.4 | 77.3 | 1.7 |
| 6 | 77.7 | 60.1 | 53.3 | 50.5 | 11.0 |

N=1220
**$p$ <0.01

There are many aspects of teacher background that might have been investigated. For this Survey, only their fluency in various languages was assessed. It is interesting that 5% of the teachers speak Spanish, 0.2% speak Chinese, and 6% "other." In Chapter IV, the home language of the students was examined as a part of their entering skills and abilities. It is shown in Table IV-11 that about 18% of the teachers have Spanish speaking students in their reading classes. Nearly 4% have students who speak Chinese as a home language, about 2.5% Vietnamese, and nearly 4%,

again, speak other languages. Examples of the wide range of the "others" include Hindu, Greek, Arabic, Korean, and Philippine (as reported from one classroom).

A large proportion of the teachers reporting foreign-language students in their reading classes come from one state, and a large percent of those students speak Spanish. It was decided to analyze the data from that state to learn how well teachers who speak Spanish were matched with students who speak Spanish. Of all the teachers reporting from the state, 38% (156) have students in their classrooms who speak Spanish as a home language. Other statistics about these 156 reading classes follow:

| | |
|---|---|
| Total number of students | 3,504 |
| Number of students speaking Spanish as a home language | 685 |
| Percent of students speaking Spanish | 19.5% |
| Number of these 156 teachers speaking Spanish | 6 |
| Percent of these teachers speaking Spanish | 3.8% |
| Number of classes that have over 50% Spanish-speaking students | 16 |
| Number of Spanish-speaking teachers in these 16 classes | 2 |

Although there are many unknown factors in the combinations that make for effectiveness in a teacher, it seems likely that training in the home language of the students might be one factor that is too important to be overlooked.

A type of aid that may be available to reading teachers inside or outside the classroom is the reading specialist or reading supervisor. Three questions investigated the availability and frequency of such aid and the kind of help that might be offered. Close to 40% of the teachers

have a reading specialist assigned to their school building (Table VI-2), but 47% have either none at all or only part of one who serves the entire school district. There is no significant difference by grade level; apparently such help is available either to all elementary school teachers or to none.

Table VI-2

Reading Specialist Help - Availability

| Availability[1] | Percent of Teachers Responding[2] |
|---|---|
| One who serves the entire school district. | 23.6 |
| One who serves several schools in the district. | 16.1 |
| One who serves only my school. | 38.3 |
| Other | 5.2 |
| None of the above is available. | 23.8 |

N=1220

[1] Grade level difference n.s.

[2] The sum of these percents exceeds 100% because teachers could mark more than one source of help.

In Table VI-3 there is evidence that 25% of the teachers receive specialist aid at least once each week. Data in Table VI-4 show that 50% of the teachers received aid through conferring about student reading problems and 50% receive special instructional resources. The next most

Table VI-3

Reading Specialist Help - Frequency

| Frequency[1] | Percent of Teachers |
|---|---|
| Almost every day | 12.1 |
| About once a week | 12.7 |
| About once a month | 8.1 |
| About once a grading period | 3.1 |
| About once a semester | 4.7 |
| About once a year | 3.7 |
| Other | 19.3 |
| Never | 8.0 |
| No Response | 28.4 |

N=1220

[1]Grade level difference n.s.

Table VI-4

Reading Specialist Help - Type of Aid

| Type of Aid | Percent of Teachers | |
|---|---|---|
| | Responding[1] | Not Responding |
| Diagnosing individual reading problems | 42.2 | 53.8 |
| Teaching students who have reading problems | 30.5 | 68.5 |
| Administering tests or inventories | 39.8 | 60.1 |
| Conferring with you about student reading problems | 50.2 | 49.7 |
| Providing you with instructional resources | 50.2 | 49.8 |
| Helping you improve your classroom instruction | 19.7 | 80.3 |
| Providing workshops for inservice training | 21.4 | 78.6 |
| Demonstrating instructional techniques | 14.9 | 85.1 |
| Other | 2.9 | 97.1 |

N=1220

[1] The sum exceeds 100% because teachers could indicate more than one type of aid.

frequently delivered types of help are individual diagnosis of reading problems and, probably concurrently, the administration of various kinds of reading tests. Nearly one-third receive teaching help for disabled readers, and about one-fifth benefit from inservice workshops run by reading specialists.

This chapter has examined Additional Factors, variables which affect teaching success but do not fit naturally within the Cooley-Leinhardt model of analysis. Among the variables considered were the responsibilities teachers have for teaching subjects other than reading; the background that teachers bring to their job, in this case fluency in languages; and professional help by reading specialists or supervisors, concerning its availability, frequency, and type.

## VII. SUMMARY AND RECOMMENDATIONS

The purpose of this report was to present an analysis of descriptive data on reading instructional practices gathered from questionnaires sent to over 3,000 teachers in grades one, three, four, and six in Delaware, New Jersey, and Pennsylvania. The actual number of teachers who returned usable questionnaires was 1,220, evenly distributed across grade levels and representing 26,035 students. The questions were selected and the report organized under the Cooley-Leinhardt (1975)/Cooley-Lohnes (1976) model of evaluating instructional processes. Recent process-product research was referred to for the purpose of forming a background for evaluating the data reported here. Individual state data analyses will be made available to the appropriate state departments of education.

Recent research on the students' Opportunity to Learn shows that the amount of time spent in instructional activities is related positively to student achievement gain. Two aspects of "time" stand out in this report. One is the amount of time that the teachers have to relate individually to the students. This is at least partially decided by class size. It was shown that class size medians varied by grade level and by state but within a rather narrow margin. The point that needs emphasis is the disparity of class size shown by the range: from a low of 2 to a high of 38. It was pointed out that recent research studies indicate a clear learning advantage for classes under 20 over those above 30 (e.g., Glass, et al., 1978). The students in the larger classes are working under a disadvantage in comparison to those in smaller classes. In

addition, the difference in time lost to managerial activities is twice as much in some reading classes (2 hours each week) as in other reading classes; when calculated in connection with the median amount of time allocated to reading (1 hour per day in grades 1, 3, and 4; 50 minutes in grade 6), it seems probable that some classes suffer a serious loss of instructional time as the teachers deal with management problems.

Another aspect of the Opportunity to Learn construct is the overlap between curriculum taught and the content of the tests used to evaluate the success of that teaching. More than 87% of the tri-state teachers use a basal reader as a major resource for their reading instructional material, especially in rural areas. They tend to see the materials as attractive to the students, current, accurate, adequate in coverage, and useful for the ability range of the students. However, less than 70% of them use the basal text objectives for planning daily lessons. In terms of testing, the teachers are more likely to use their own judgment for regrouping the students than they are to use tests that accompany the basal, but when it comes time to make a "periodic assessment," 86% use the basal tests.

What seems to emerge from these statistics is that many teachers, having selected the basal as their major instructional resource, do relate the basal objectives to their daily teaching plans and do use the basal tests as the basis for regrouping and also for regular assessment of student progress. But there is a significant proportion of teachers who apparently do not see the value of planning with the basal objectives

directly in front of them and then using the tests that are designed to go with them. The thrust of process-product research is that instructional objectives should be clear and should be followed, and the tests should be designed to assess progress on those objectives. There seems to be a need for some teachers to increase their own comprehension of this web of relationships in order that student learning may be improved in the tri-state area.

Under a second construct of the Cooley-Leinhardt model, Motivators, the variety of instructional activities was analyzed. Reports of research in aspects of language acquisition are bringing to our awareness the complexity of its nature. There is no simple route to the attainment of language facility. Instruction in language-use needs to be made through many modes and methods. Therefore, the few minutes per week allotted to oral-reading-by-students and to teacher-reading-to-students needs examination. Some students are receiving one minute each week, some 90 minutes; time allocated for both expression and input seems to show considerable variation. While not all types of student or teacher oral reading are instructional, there are enough types that are beneficial to cause tri-state educators to analyze the time allocations prevailing in their localities. It is easy to forget that book language is different from the child's natural language, heard and spoken with the family and in the schoolyard. The task of learning to read, then, requires an adaptation to a somewhat unfamiliar tongue. This task can be eased by a good program of oral reading, which provides practice in learning book language at the initial stage of language-learning: listening.

The spread of the time allotments for the other language arts (English, spelling, and penmanship) suggests that some children are receiving far less time in language development than others. Although this study has focused - usefully - on reading as a distinct curriculum area, reading is also to be thought of as one part of the language arts, an integral part which is enhanced by and enhances the learning of the others. The communication process requires exact transmission and reception of thought, and each of the language arts contributes to that process. Therefore it is recommended that the lower time allotments for all the language arts reported in Chapter II be examined with this integration in mind.

The school library can be a useful resource for adding variety to instruction. While 94% of these teachers state that there is one in their school, the percent who use it on a weekly basis ranges from 69% to 84%. The difference between the proportion who have a school library available and those who use it weekly bears looking into by area educators. Analysis of the discrepancy may center both on the libraries themselves and on the teachers who do not make use of them. Perhaps the delivery of this service can be improved so that each teacher who can will include its use in instructional planning.

Although student self-management is considered to be motivational in the Cooley-Leinhardt model, area teachers tend to retain control of the management of the classroom. There is some latitude for student-selection of materials and activities, for seating and for self-evaluation, but these

practices are not universally permitted nor permitted all the time by most of the teachers. The enhancement of motivation is more likely to be sought by individualization of assignments, as described under grouping procedures. First and third grade teachers plan for individual students to work independently after their instruction in small or medium-sized groups, and fourth and sixth grade teachers use individualized/independent work as their first choice in organizing for instruction, followed by instruction in medium or large-sized groups. What seems to be emerging in current process-product research is that, at least for basic skills instruction, student self-management is less effective than a combination of group work and individualized work, all carefully planned and monitored by the teacher. The tri-state area teachers seem to have a good grasp of effective instructional management, in this respect.

The construct of Structure and Placement includes an analysis of instructional objectives, not their content (as in Opportunity) but their availability, specificity, and use. This, again, seems to be a place where tri-state educators might take a close look. Although no more than 28% of the teachers declare that state-wide objectives are not available, only 19% use them for planning daily lessons. With the current debate on basic skills instruction and the attendant creation of minimum standards for graduation, it would seem useful to have teachers planning their daily instructional sequences with the state standards in front of them. Even when the discussion changes to teacher-made or basal text objectives, there are significant numbers of teachers who do not make use of them for daily

planning, and the disuse of them increases by grade level, from grades one to six. If students in secondary schools were not, at least apparently, failing minimum standards tests in large numbers, the drop in use of objectives while making lesson plans would not seem important, perhaps, but there seems to be reason for concern. Increased and more deliberate use of instructional objectives in making daily lesson plans by teachers in the later elementary school grades might be one way to improve the basic skills of secondary school students.

Placement of students into the most appropriate point in the curriculum requires a knowledge of their entering abilities. The data here may have implications for pre-service teacher training. Three aspects of entering abilities that were probed are reading achievement level, socioeconomic status (SES) level, and the home language spoken by a student. In terms of reading achievement, a relatively homogeneous reading class would have between 81% and 100% of the students reading on the same level; only 32% of the teachers reported that they deal with that degree of homogeneity. The other teachers have classes that vary widely from more than one year below grade level to more than one year above grade level. Socioeconomic levels also vary widely, with only 33% of the teachers reporting 81% to 100% of their students at one SES level. Teachers have long been trained to deal with a variety of reading achievement levels, but the research for differing needs of students of differing SES levels is new and has probably not been widely disseminated. Nonetheless, it seems to be true that low SES students respond to different instructional procedures

than the ones that produce learning gains in high SES students. Some awareness of that apparent difference might well be developed in prospective teachers.

In addition, a number of students in the elementary schools today do not speak English as a home language. The variety of home languages spoken by children of the tri-state area is astonishing. This is happening at a time when many teacher training institutions are no longer requiring a foreign language as part of the undergraduate education of prospective teachers. Aside from language-speaking capabilities, the sense of what it means to express oneself in a second language, the linguistic limitations and possibilities thereby imposed, and the sense of what it means to be native to a culture which is different from the one in which you live are concepts that are unlikely to be learned by those who never study a foreign language. It seems reasonable to wonder how well even the best-intentioned person with no background of foreign language study can relate to the foreign-speaking student.

One other aspect of teacher background that merits attention against another background, student achievement in the basic skills, is the question of how many school subjects a teacher may be expected to teach well. Many of the reading teachers responding to this survey are required to teach language arts, social studies, mathematics, and science as well as reading. This is particularly true of the first grade teachers. About 97% of them teach mathematics in addition to reading. However, as the Survey of Classroom Practices in Mathematics (Graeber, et al., 1977) points out, the

importance of using manipulative teaching equipment and hands-on teaching techniques in mathematics has long been understood but the tri-state teachers fall short in their use. Some even consider paper and pencil to be "manipulatives." This is an orientation characteristic of reading teachers and language arts specialists, experts in manipulating symbols like letters and words. Where an improvement in both of these basic skills is a serious goal, greater efforts to provide needed inservice education are recommended to help teachers meet these diverse requirements. Following the inservice training, administrators can help teachers to implement their new learning in their classrooms, by showing informed support, providing appropriate materials, and monitoring their use.

The above summary and recommendations are tentative only. Different readers will find other points of importance which they can use to their own purposes. It is hoped that educators in the area will gather data from their own districts and compare their findings with those reported here, analyzing contrasts both for strengths and for opportunities to improve their classroom instructional practices.

BIBLIOGRAPHY

Anderson, L. M., Evertson, C. M., & Brophy, J. E. An experimental study of effective teaching in first-grade reading groups. The Elementary School Journal, 1979, 79(1), 193-223.

Ashton-Warner, Sylvia. Spinster. New York: Bantam Books, 1959.

Austin, M. C., & Morrison, C. The First R: The Harvard report on reading in elementary schools. New York: Macmillan, 1963.

Brady, M. E., Clinton, C., Sweeney, J. M., Peterson, M., & Poyner, H. Study Findings: Final report of the Instructional Dimensions Study 1976-1977 (Contract No. NIE 400-76-0060, National Institute of Education). Washington, D.C.: U.S. Department of Health, Education and Welfare, 1977.

Brophy, J. E., & Evertson, C. M. Process-product correlations in the Texas Teacher Effectiveness Study (Final Report). Austin, Texas: University of Texas, Research and Development Center for Teacher Education, June 1974. (ERIC Document Reproduction Service No. Ed 091 394)

Calfee, R. C., & Drum, P. A. (Eds.) Teaching reading in compensatory classes. Newark, Delaware: International Reading Association, 1979.

Calkins, D. S., Godbout, R. C., Poynor, L. H., & Kugle, C. L. Relationships between pupil achievement and characteristics of observed teacher behavior distributions. Austin, Texas: University of Texas, Research and Development Center for Teacher Evaluation, June 1976.

Cooley, W. W., & Leinhart, G. Design for the Individualized Instruction Study: A study of the effectiveness of individualized instruction in the teaching of reading and mathematics in compensatory education programs (Final Report). Pittsburgh: University of Pittsburgh, Learning Research and Development Center, October 1975.

Cooley, W. W., & Lohnes, P. R. Evaluation research in education. New York: Irvington Publishers, 1976.

Directory of Delaware schools. Delaware Department of Instruction, September 1975.

Directory of public elementary and secondary schools in selected districts. Washington, D.C.: U.S. Department of Health, Education, and Welfare/Office for Civil Rights, 1970.

Dishaw, M. Descriptions of allocated time to content areas for B-C period: Beginning Teacher Evaluation Study (Tech. Note IV-2b). San Francisco, Calif.: Far West Laboratory, 1977.

Durkin, D. Reading comprehension instruction. Reading Research Quarterly, 1978-79, 14(4), 481-533.

Durkin, D. Teaching them to read. Boston: Allyn and Bacon, 1971.

Durkin, D. What classroom observation reveal about reading comprehension instruction (Tech. Rep. 106). Urbana-Champaign: University of Illinois, Center for the Study of Reading, October 1978.

Farr, R., & Weintraub, S. Practitioners should play a role in developing new methodologies. Reading Research Quarterly, 1976, 11(2), n.p.

Gettinger, M., & White, M. A. Which is the stronger correlate of school learning? Time to learn or measured intelligence? Journal of Educational Psychology, 1979, 71(4), 405-412.

Glass, G. V., & Smith, M. L. Meta-analysis of research on the relationship of class-size and achievement. San Francisco, Calif.: Far West Laboratory for Educational Research and Development, 1978.

Good, T. L. Teacher effectiveness in the elementary school. Journal of Teacher Education, March-April 1979, 30(2), 52-64.

Graeber, A. O., Rim, E-D, & Unks, N. J. A survey of classroom practices in mathematics: Reports on first, third, fifth, and seventh grade teachers in Delaware, New Jersey, and Pennsylvania. Philadelphia: Research for Better Schools, 1977.

Guthrie, J., & Seifert, M. Research and education in reading. Journal of Research and Development in Education, Spring 1978, 11(3), 12-19.

Harnischfeger, A., & Wiley, D. E. The teaching - learning process in elementary schools. Curriculum Inquiry, 1976, 6(1), 5-44.

Harris, A. J., Morrison, C., Serwer, B. L., & Gold, L. A continuation of the CRAFT Project: Comparing reading approaches with disadvantaged urban Negro children in the primary grades. New York: City University of New York, 1968. (ERIC Document Reproduction Service No. ED 020 297)

Harris, A. J., & Serwer, B. L. Comparison of reading approaches in first grade teaching with disadvantaged children. New York: City University of New York, 1966. (ERIC Document Reproduction Service No. ED 010 037)

Harris, A. J., & Serwer, B. L. Comparing reading approaches in first grade teaching with disadvantaged children. The Reading Teacher, May 1967, 20(8), 698-703.

Harris, A. J., & Sipay, E. R. How to increase reading ability (6th edition). New York: David McKay, 1975.

Heinrich, J. S. Elementary oral reading: methods and materials. The Reading Teacher, October 1976, 30(1), 10-15.

Hiatt, D. B. Time allocation in the classroom: Is instruction being shortchanged? Phi Delta Kappan, December 1979, 61(4), p. 289.

Howlett, N., & Weintraub, S. Instructional procedures. In R. C. Calfee, & P. A. Drum (Eds.) Teaching reading in compensatory classes. Newark, Delaware: International Reading Association, 1979.

Kean, M. H., Summers, A. A., Raivetz, M. J., & Farber, I. J. What works in reading? Philadelphia, Pa.: Office of Research & Evaluation, The School District of Philadelphia, May 1979.

Kiesling, H. Productivity of instructional time by mode of instruction for students at varying levels of reading skill. Reading Research Quarterly, 1978, 13(4), p. 554.

Klein, M. F., Tye, K. A. & Wright, J. E. A study of schooling: Curriculum. Phi Delta Kappan, December 1979, 61(4), p. 244.

Mann, C. H. How schools use their time: Time allotment practice in 444 cities, including a study of trends from 1826-1926. New York: Teachers College, Columbia University, 1928.

McDonald, F. J., & Elias, P. Beginning Teacher Evaluation Study, Phase II 1973-74 (Executive Summary Report). Princeton, N.J.: Educational Testing Service, 1976.

Medley, Donald M. Teacher competence and teacher effectiveness: A review of process-product research. (ACTE Suite 610) Washington, D.C.: American Association of Colleges for Teacher Education, August 1977.

New Jersey education directory. Trenton, N.J.: New Jersey Department of Education, 1976.

1976 - 1977 Pennsylvania education directory. Lebanon, Pa.: Applied Arts Publishers, 1976.

Professional News. Teacher, October 1979, 97(2), p. 32.

Pipho, C. Minimum competency testing in 1978: A look at state standards. Phi Delta Kappan, May 1978, 59(9), 585-588.

School universe data book: School year 1977-1978: Delaware. Denver: Curriculum Information Center, Inc., 1976-1977.

School universe data book: School year 1977-1978: New Jersey. Denver: Curriculum Information Center, Inc., 1976-1977.

School universe data book: School year 1977-1978: Pennsylvania. Denver: Curriculum Information Center, Inc., 1976-1977.

Smith, M. L., & Glass, G. V. Relationship of class - size to classroom processes, teacher satisfaction, and pupil affect: A meta-analysis. San Francisco: Far West Laboratory, 1979.

Stallings, J. A., & Kaskowitz, D. H. Follow through classroom observation evaluation, 1972-1973. Menlo Park, Ca.: Stanford Research Institute, August 1974.

Stauffer, R. G. Directing reading maturity as a cognitive process. New York: Harper & Row, 1969.

Swalm, J., & Hunt, B. C. The three R's: Reading, reading, reading: A survey of procedures and practices used to teach reading in New Jersey schools. Trenton, N.J.: New Jersey Department of Education, May 1974.

Winfield, L. F., & Venezky, R. L. Case studies of school factors and reading achievement. Paper presented at the Conference of the Eastern Educational Research Association, Charleston, South Carolina, 1979.

Wylie, R. E. Diversified concepts of the role of the reading consultant. The Reading Teacher, March 1969, 22(6), 519-522.

Appendix A:

Reading Survey Questionnaire

CODE ☐☐☐☐☐

# A SURVEY

# OF PRACTICES IN TEACHING READING

Directions: Please answer each item by writing your answer on the line or by marking an X in the box.

1. You are being asked to answer this questionnaire because you are a teacher of reading in the first, third, fourth, or sixth grade. In which grade do you teach reading? (If you teach reading in more than one grade and are not sure which grade to use for purposes of answering this questionnaire, please choose one grade and check it below.)

   ☐ a) First grade

   ☐ b) Third grade

   ☐ c) Fourth grade

   ☐ d) Sixth grade

2. How many reading classes in this grade do you teach?

   ☐ a) One--SKIP QUESTION #3. GO TO QUESTION #4.

   ☐ b) More than one--GO TO QUESTION #3.

3. If you teach reading to more than one class in this grade, choose one class to use for purposes of answering this survey. (Identify this one class by writing on the line your conventional designation for the class--for example, "Mr. Smith's class" or "3rd period reading.")

   _____

Research for Better Schools, Inc.
1700 Market Street
Philadelphia, Pennsylvania 19103

12-27-78

4. Which subjects do you teach besides reading? Put an X in each box that applies.

- ☐ a) Language arts
- ☐ b) Social studies
- ☐ c) Mathematics
- ☐ d) Science
- ☐ e) None--I teach only reading.
- ☐ f) Other (specify)_____

5. How many students are presently enrolled in the reading class you are describing in this questionnaire? (Write the number on the line.)

_____

6. On an average day, how many students in this reading class are absent?

_____

7. On each line, write the number of students in this class whose first (or home) language is indicated in that box.

| English | Spanish | Chinese | Vietnamese | Other (specify) | Other (specify) |
|---|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ | _____ |

8. In which language (or languages) can you communicate effectively?

- ☐ a) English
- ☐ b) Spanish
- ☐ c) Chinese
- ☐ d) Vietnamese
- ☐ e) Other (specify) _____
- ☐ f) Other (specify) _____

9. In each box,write the number of students in this class whose background, as you perceive it, reflects the socio-economic status (SES) indicated in that box.

| Low SES | Lower Middle SES | Middle SES | Upper Middle SES | High SES |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |

10. In each box, write the number of students in this class whose reading level is indicated in that box.

| More than one year below grade level | About one year below grade level | About on grade level | About one year above grade level | More than one year above grade level |
|---|---|---|---|---|
| | | | | |

11. During an average week, how much classroom instructional time do these students have scheduled in each subject listed below. Write the approximate number of minutes for each subject for each day of an average week.

| SUBJECTS | Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|---|---|---|---|
| Handwriting | | | | | |
| Spelling | | | | | |
| English (composition, listening, grammar, etc.) | | | | | |
| Reading | | | | | |

12. Are the students in this class given instruction in reading in the content areas?

☐ Yes--ANSWER QUESTION #13.

☐ No--SKIP QUESTION # 13. GO TO QUESTION # 14.

☐ I don't know--SKIP QUESTION # 13. GO TO QUESTION # 14.

13. Indicate the approximate number of minutes per week spent on reading instruction in different content areas--first, instruction in your reading class; second, instruction in each class for a content area.

| CONTENT AREA | Minutes per week on reading instruction in reading class | Minutes per week on reading instruction in a content area class |
|---|---|---|
| a) Social Studies | | |
| b) Science | | |
| c) Mathematics | | |
| d) Other (specify) _____ | | |

14. During an average week, about how much reading-class time is lost as a result of interruptions by fire drills, assemblies, hallway noise, announcements, and so on? On the line, write the approximate number of minutes lost.

_____minutes

15. After classroom procedures have been established for the school year, about how much reading-class time during an average day do you use to clarify non-academic classroom procedures for these students (e.g., how to obtain supplies, how to be excused from class)? On the line, write the approximate number of minutes per day used for this purpose.

_____minutes

16. About how much reading-class time during an average day do you use to discipline, or control, students because of their disobedient or disruptive behavior? On the line, write the approximate number of minutes used for this purpose.

_____ minutes

17. During an average week, how often during reading class do students engage in the following activities? Put an X in each box that applies.

| ACTIVITIES | Times per week | | | | |
|---|---|---|---|---|---|
| | Never | Less than once | 1-2 times | 3-4 times | 5 or more times |
| a) Students choose their own instructional activities | | | | | |
| b) Students choose their own instructional materials | | | | | |
| c) Students choose their own seating | | | | | |
| d) Students manage their own in-class behavior (e.g., getting and returning materials) | | | | | |
| e) Students do peer tutoring or help one another on assignments | | | | | |
| f) Students assess their own work, (e.g., scoring their own papers) | | | | | |

18. To what extent are you involved in the selection process, or decision-making process, for each of the following decisions? Put an X in each box that applies.

| INSTRUCTIONAL DECISIONS | Sole decision-maker | Share in decision-making | My opinion is requested | I am not involved |
|---|---|---|---|---|
| a) Selecting basic instructional materials in reading | | | | |
| b) Selecting supplementary instructional materials in reading | | | | |
| c) Determining goals and objectives for reading | | | | |
| d) Determining instructional techniques for teaching reading | | | | |
| e) Determining methods for placing students in reading | | | | |
| f) Determining methods for assessing students' progress in reading | | | | |

19. On the average, how often do you use each of the following materials in this reading class? Mark only those boxes that apply.

| MATERIALS | Use as major resource in teaching reading--almost daily | Use as supplementary resource--at least once a week | Use only occasionally--no more than two or three times a month |
|---|---|---|---|
| a) Basal readers | | | |
| b) Reading workbooks | | | |
| c) Textbooks other than basal readers or workbooks | | | |
| d) Reference books (e.g., encyclopedias, dictionaries) | | | |
| e) Books other than textbooks (e.g., story books, paperbacks) | | | |
| f) Newspapers, magazines, periodicals | | | |
| g) Skill development kits or materials (e.g., SRA, Barnell-Loft) | | | |
| h) Teacher-prepared materials (dittos, etc.) | | | |
| i) Commercial dittos | | | |
| j) Flash cards | | | |
| k) Films and/or filmstrips | | | |
| l) Slides and/or transparencies | | | |
| m) Tapes and/or records | | | |
| n) Video or television tapes | | | |
| o) Programmed instructional machines (e.g., System 80) | | | |
| p) Games, puzzles, toys | | | |
| q) Other (specify) _____ | | | |

20. From the column for "major resource" in #19, identify the one resource used most often with this class. (Write the letter.)_____

21. Write the title, publisher, and date of publication of the resource that you identified in #20. If you use materials from several publishers as this one resource (for example, you may use two or three basals), list all that apply.

_____

_____

_____

_____

22. Is the resource identified in #21 part of a program or series also used for students at other grade levels?

a) Grade level before mine ☐ Yes ☐ No

b) Grade level after mine ☐ Yes ☐ No

23. How do you describe the one major resource that you indicated in #21? (Mark one box on the 5-point scale--1 for the most attractive, 5 for most unattractive, etc.)

THE MATERIALS IDENTIFIED IN #21:

a) are attractive for my students [1] [2] [3] [4] [5] are unattractive for my students

b) are up-to-date for my students [1] [2] [3] [4] [5] are out-of-date for my students

c) are accurate in content [1] [2] [3] [4] [5] are not accurate in content

d) are adequate in content coverage [1] [2] [3] [4] [5] are not adequate in content coverage

e) meet the range of abilities of my students [1] [2] [3] [4] [5] do not meet the range of abilities of my students

24. Which reading objectives are available to you for this class and how do you use them? Put an X in each box that applies.

| SOURCE OF READING OBJECTIVES | Not available | Available | | | |
|---|---|---|---|---|---|
| | | But do not use | Use to plan daily lessons | Use to write tests | Use for other purposes (specify) |
| a) State-wide educational objectives | | | | | |
| b) District-wide objectives | | | | | |
| c) School-wide objectives | | | | | |
| d) Teacher-developed objectives | | | | | |
| e) Basal text's objectives | | | | | |
| f) Other (specify) _____ | | | | | |

25. Which techniques do you use at the beginning of a reading lesson to make students aware of the specific instructional objectives that they are to master and how frequently do you use these techniques? Put an X in each box that applies.

| TECHNIQUES | Almost never use | Seldom use | Fre-quently use | Almost always use |
|---|---|---|---|---|
| a) I point out the objectives in the reading material | | | | |
| b) I state and explain the objectives to be learned | | | | |
| c) I give an example of what is to be learned | | | | |
| d) The printed materials make the objectives clear without my help | | | | |
| e) Other (specify)_____ | | | | |

26. Indicate the approximate portion of time per reading period that students spend in the following groupings. Put an X in each box that applies.

| GROUPINGS | Approximate Portion of Time per Reading Period | | | | |
|---|---|---|---|---|---|
| | Almost none | About 1/4 | About 1/2 | About 3/4 | Almost all |
| a) Whole class (more than 15 students) | | | | | |
| b) Medium size groups (8-15 students) | | | | | |
| c) Small groups (3-7 students) | | | | | |
| d) Individuals working independently | | | | | |

27. What is the usual basis for initially assigning your students to their reading instructional groups (and/or placing them into their reading materials)? Put an X in each box that applies.

- ☐ a) Standardized achievement test results
- ☐ b) Criterion-referenced test results (e.g., textbook tests)
- ☐ c) Informal reading inventory results
- ☐ d) Past teacher's recommendation
- ☐ e) Reading specialist's recommendation
- ☐ f) Reading readiness tests results
- ☐ g) Other (specify)_____

28. How often do students in this class take a standardized reading achievement test?

- ☐ a) Twice a year
- ☐ b) Once a year
- ☐ c) Once every other year
- ☐ d) Don't know
- ☐ e) Other (specify)_____

29. If students in this class have taken or will take a standardized reading achievement test in this school year, indicate the name of the test.

- ☐ a) California Achievement Tests (CAT)
- ☐ b) Comprehensive Tests of Basic Skills (CTBS)
- ☐ c) Iowa Tests of Basic Skills (ITBS)
- ☐ d) Metropolitan Achievement Tests (MAT)
- ☐ e) SRA Achievement Series
- ☐ f) Stanford Achievement Test
- ☐ g) Other (specify)_____

30. What means do you periodically use to assess students for their mastery of reading skills and concepts? Put an X in each box that applies.

- ☐ a) Use test from basal text or from workbook
- ☐ b) Use other commercial criterion-referenced (or "mastery") test
- ☐ c) Use locally developed test
- ☐ d) Use my own test
- ☐ e) Use my own judgment
- ☐ f) Other (specify)_____

31. Must students in this class demonstrate mastery before moving on to the next skill or unit?

- ☐ a) Yes--ANSWER QUESTION #32.
- ☐ b) No--SKIP QUESTION #32. GO TO QUESTION #33.

32. If you answered Yes to #31, what do you mean by "mastery"?

_____

_____

33. Do you regroup students during the school year on the basis of their performance, or progress, in reading?

- ☐ a) Yes--GO TO QUESTION #34.
- ☐ b) No--SKIP QUESTION #34. GO TO QUESTION #35.

34. How do you decide to regroup students as indicated in #33? Put an X in each box that applies.

- ☐ a) Use my own judgment
- ☐ b) Use locally developed test
- ☐ c) Use test that accompanies reading materials
- ☐ d) Use other commercially developed test
- ☐ e) Use staff consultation
- ☐ f) Use judgment of reading specialist
- ☐ g) Other (specify)_____

35. Indicate the approximate number of minutes per week that the typical student in this class spends on the following reading and reading-related activities. Write the approximate time for each activity on the line.

| ACTIVITY | APPROXIMATE MINUTES PER WEEK |
|---|---|
| a) Oral reading | |
| b) Discussion of stories, poems, etc. | |
| c) Teacher reading to students (e.g., stories, poems) | |
| d) Choral reading | |
| e) Retelling of stories | |
| f) Independent seatwork (e.g., workbooks, ditto masters) | |
| g) Silent reading (e.g., SSR, free reading, reading in basal) | |
| h) Listening skills development | |
| i) Phonics and other word-attack skills | |
| j) Vocabulary development | |
| k) Literal comprehension skills | |
| l) Inferential comprehension skills | |
| m) Study and library skills (e.g., note taking, outlining, card catalog) | |
| n) Composition (during reading time) | |
| o) Group projects (e.g., research, drama) | |
| p) Independent projects (e.g., research, art) | |
| q) Games, puzzles, (alone or in groups) | |
| r) Other (specify)_____ | |

36. For reading homework, indicate how often you give each of the following reading-related activities to be completed outside of reading class time. Put an X in each box that applies.

| READING HOMEWORK | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Neve |
|---|---|---|---|---|---|
| a) Reading text, story books, etc. | | | | | |
| b) Workbooks, dittos, etc. | | | | | |
| c) Word or vocabulary study | | | | | |
| d) Research projects | | | | | |
| e) Creative arts projects | | | | | |
| f) Other (specify) _____ | | | | | |

37. After a student completes a reading assignment, how soon, on the average, do you give that student information on the correctness of his/her performance? Put an X in each box that applies.

| TYPE OF ASSIGNMENT | Within a few minutes | Within an hour | Within 3 hours | Within 24 hours | Within 3 days | Within one week | Over one week | Do not correct |
|---|---|---|---|---|---|---|---|---|
| a) Classwork in textbook | | | | | | | | |
| b) Classwork in workbook | | | | | | | | |
| c) Homework | | | | | | | | |
| d) Chapter/unit test | | | | | | | | |
| e) Other projects (e.g., drama, research) | | | | | | | | |
| f) Other (specify) _____ _____ | | | | | | | | |

38. How do you generally respond to students' work in reading? Mark only the responses you actually use. Indicate the priority of each response by using 1 for what you most often do, 2 for what you next most often do, and so on.

- [ ] a) I try to find work to praise (keeping the criticism to a minimum).
- [ ] b) I try to indicate work that needs improvement (not overdoing the praise).
- [ ] c) I give or withhold privileges, prizes, rewards, honors, etc.
- [ ] d) I let grades speak for themselves.
- [ ] e) I respond according to the nature and needs of the child.
- [ ] f) Other (specify)_____

39. What remedial steps do you usually take when a student has difficulty with an aspect of reading? Mark only the steps you actually use. Indicate the priority of each step by using 1 for what you most often do, 2 for what you next most often do, and so on.

- [ ] a) I tutor the student myself.
- [ ] b) I request professional help (e.g., from a reading specialist).
- [ ] c) I request help from an aide.
- [ ] d) I arrange for peer tutoring.
- [ ] e) I assign homework with skill development materials.
- [ ] f) I assign seatwork with skill development materials.
- [ ] g) I assign independent reading.
- [ ] h) Other (specify)_____

40. Do you reward students for numbers of books read during a given time period? Check only those boxes that apply.

- [ ] a) No
- [ ] b) Yes--I display their names.
- [ ] c) Yes--I improve their grades in reading.
- [ ] d) Yes--I excuse them from other work.
- [ ] e) Yes--I give them special privileges.
- [ ] f) Yes--(specify other)_____

41. Is a school library or bookmobile available to the students in this class?

☐ Yes--ANSWER QUESTION #42.

☐ No-- SKIP QUESTION #42. GO TO QUESTION #43.

42. How often do the students in this class typically visit the library or bookmobile? Put an X in each box that applies.

| GRADE LEVEL OF STUDENTS | At least once a week | At least once a month | Less than once a month |
|---|---|---|---|
| Students reading below grade level | | | |
| Students reading on grade level | | | |
| Students reading above grade level | | | |

43. Approximately how many hours per week do you use aides or assistants (such as student teachers, parent volunteers, or paid aides) to help you in this reading class?

☐ a) Almost 0 hours per week

☐ b) About 1 hour per week

☐ c) About 2 hours per week

☐ d) About 3 hours per week

☐ e) About 4 hours per week

☐ f) About 5 hours per week

☐ g) More than 5 hours per week

44. Put an X in the box if a reading specialist (coordinator, supervisor, etc.) of the type listed below is available to you. (Do not include remedial reading teachers.)

☐ a) One who serves the entire school district.

☐ b) One who serves several schools in the district.

☐ c) One who serves only my school.

☐ d) Other (specify)_____

☐ e) None of the above is available-- GO TO QUESTION #47.

45. How often does the reading specialist indicated in #44 (coordinator, supervisor, etc.) attempt to help either you in your teaching of reading or the students in this class in their learning to read?

- ☐ a) Almost every day
- ☐ b) About once a week
- ☐ c) About once a month
- ☐ d) About once a grading period
- ☐ e) About once a semester
- ☐ f) About once a year
- ☐ g) Other (specify)_____
- ☐ h) Never--Skip question #46. For you, this is the end of the questionnaire. Thank you very much.

46. What help do you receive from the reading specialist indicated in #44 and #45? Put an X in each box that applies.

- ☐ a) Diagnosing individual reading problems
- ☐ b) Teaching students who have reading problems
- ☐ c) Administering tests or inventories
- ☐ d) Conferring with you about student reading problems
- ☐ e) Providing you with instructional resources
- ☐ f) Helping you improve your classroom instruction
- ☐ g) Providing workshops for inservice training
- ☐ h) Demonstrating instructional techniques
- ☐ i) Other (specify)_____

END OF QUESTIONNAIRE. THANK YOU VERY MUCH.

Appendix B:

Distribution of Questionnaires

Appendix B

Table 1

Distribution of Questionnaire Returns[1] by Region[2] and Grade Level*

| Region \ Grades | 1 | 3 | 4 | 6 | Total |
|---|---|---|---|---|---|
| Metropolitan | 15.6 | 13.6 | 13.2 | 14.8 | 14.3 |
| City | 19.3 | 20.9 | 20.7 | 23.3 | 21.0 |
| Suburb of Metro | 21.8 | 19.6 | 24.7 | 19.8 | 21.5 |
| Suburb of City | 17.5 | 17.4 | 16.3 | 14.8 | 16.6 |
| Rural | 25.8 | 28.5 | 25.1 | 27.2 | 26.6 |
| Total | 100.0 | 100.0 | 100.0 | 99.9 | 100.0 |

[1] N = 1220

[2] Bussing for desegregation in Delaware, at the beginning of the 1978-79 school year, blurred regional distinctions. For this tri-state Survey, definitions operating previous to bussing have been used.

*$p > .05$

Appendix B

Table 2

Distribution of Questionnaires and Returns, By State and Grade

| | DELAWARE | | | | | NEW JERSEY | | | | | PENNSYLVANIA | | | | | TOTAL | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | T | 1 | 3 | 4 | 6 | T | 1 | 3 | 4 | 6 | T | 1 | 3 | 4 | 6 | T |
| Number Returned | 33 | 37 | 28 | 21 | 119 | 107 | 99 | 97 | 110 | 413 | 186 | 180 | 170 | 152 | 688 | 326 | 316 | 295 | 283 | 1220 |
| Number Sent | 64 | 67 | 66 | 52 | 249 | 302 | 303 | 305 | 303 | 1213 | 434 | 432 | 435 | 476 | 1777 | 800 | 802 | 806 | 831 | 3239 |
| Rate of Return | 51.6% | 55.2% | 42.4% | 40.4% | 47.8% | 35.4% | 32.7% | 31.8% | 36.3% | 34.0% | 42.9% | 41.7% | 39.1% | 31.9% | 38.7% | 40.7% | 39.4% | 36.6% | 34.1% | 37.7% |

Appendix C:

Letters to Principals and Teachers

January 2, 1979

Dear Principal:

Research for Better Schools is under contract with the National Institute of Education to conduct a three-state survey of the practices of reading teachers in grades 1, 3, 4, and 6. Your school has been selected in the sample, and your help will be greatly appreciated.

The questionnaire and data-gathering procedures have been examined by appropriate persons in your State Department of Education; in fact, one section of the questionnaire has been developed by the Department of Education to gather information related to state-wide needs. The complete survey will provide data concerning the actual practices of teachers of reading, and the results should be of genuine interest to all who seek ways and means to improve the teaching of reading. The success of the survey, however, depends upon the cooperation of those who daily implement reading programs. Because the distribution of the questionnaires is limited, every response will count. Please help.

We have enclosed surveys for:

Surveys may be distributed on any random basis so long as the above specifications are satisfied. If a teacher teaches reading at more than one grade level, please designate <u>one</u> grade for this teacher.

A self-addressed, metered envelope is enclosed in each teacher's packet to facilitate the return of the questionnaires. Tabulation of responses will begin in late January 1979, so completed questionnaires should be mailed as soon as possible. Every effort is being made to protect the confidentiality of all who are involved in the survey; in fact, the questionnaire and data gathering method have passed the scrutiny of an RBS committee that reviews projects according to guidelines established by the Department of Health, Education, and Welfare.

We thank you and your teachers for your efforts to help the cause of better reading education.

Sincerely,

David C. Helms, Jr.
Director, Basic Skills Component

RESEARCH FOR BETTER SCHOOLS, INCORPORATED

January 2, 1979

Dear First, Third, Fourth, or Sixth Grade Reading Teacher:

What do teachers do when they teach reading? At the present time many educators--teachers, administrators, and researchers--feel that no one really knows what procedures and methods are used by most reading teachers. Research for Better Schools, Inc., a regional educational laboratory serving Delaware, New Jersey, and Pennsylvania, is conducting a survey of first, third, fourth, and sixth grade reading teachers to determine the practices of teachers in this region. Your school has been selected as one of those to be surveyed, and your principal has identified you as a reading teacher who will be willing to help with the survey. (If you do not teach reading to grades 1, 3, 4, or 6, please return the enclosed questionnaire to your principal.)

We are sympathetic to the plight of teachers who have so many demands on their time; however, since we are able to distribute only a limited number of questionnaires, your reply will be very important for the successful completion of the survey. Please help and give us the benefit of your knowledge and experience by completing the enclosed questionnaire.

Tabulation of responses will begin late in January 1979, so we will need your completed questionnaire mailed to us in the enclosed metered envelope as soon as possible. All questionnaires will be treated with as much confidentiality as possible. Both the survey instrument and the data gathering method have passed the careful scrutiny of an RBS committee that reviews projects according to guidelines established by the Department of Health, Education and Welfare.

We thank you for your time and for sharing your professional knowledge with us. Together, we hope to add to the knowledge of current practices and thereby work toward strengthening reading education.

Sincerely yours,

David C. Helms, Jr.
Director, Basic Skills Component

## Appendix D:

## Commercial Texts Reported in Use

| States/Grades / Textbook Companies | Pa. Total | | | | N.J. | | | | Del. | | | | All States Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 |
| Allyn and Bacon, Inc. | 1 | | 1 | | | | | | | | | | 1 | | 1 | |
| American Book Co. Reading Program | 6 | 4 | 5 | 1 | 4 | 3 | 1 | 1 | | | 2 | | 10 | 7 | 8 | 2 |
| Barnell Loft, Ltd. Specific Skill Series | | 1 | | 1 | | | | | | | | | | 1 | | 1 |
| Cambridge | 2 | | | | | | | | | | | | 2 | | | |
| Charles E. Merrill Publishing Co. Linguistic Reading Program | 1 | 2 | 1 | 2 | 1 | 3 | 2 | | | | | | 2 | 5 | 3 | 2 |
| The Economy Co. Basic Reading Program - Keys to Reading | 14 | 11 | 6 | 4 | 8 | 10 | 5 | 6 | 6 | 6 | 6 | 4 | 28 | 27 | 7 | 14 |
| Educational Developmental Laboratories | | | | 2 | | | | | | | | | | | | 2 |
| Ginn & Co. | | | | | | | | | | | | | | | | |
| Reading 360 | 26 | 26 | 16 | 19 | 14 | 10 | 11 | 6 | 2 | 1 | 1 | | 42 | 37 | 28 | 25 |
| Reading 720 | 4 | 5 | 8 | 2 | 7 | 7 | 9 | 3 | 1 | 2 | | 1 | 12 | 14 | 17 | 7 |
| Unspecified | 4 | 3 | 8 | 5 | 4 | 1 | 4 | 4 | | | 2 | | 8 | 4 | 14 | 9 |
| Globe Book Company, Inc. | | | 2 | | | | | | | | | | | | 2 | |
| Harcourt Brace Jovanovich | | | | | | | | | | | | | | | | |
| Basic Reading Program - Bookmark Reading Program | 10 | 12 | 13 | 8 | 5 | 5 | 1 | 4 | | | 1 | | 15 | 17 | 15 | 12 |
| Unspecified | 2 | 4 | 1 | 2 | 1 | 1 | 1 | 1 | | | | | 3 | 5 | 2 | 3 |

| States/Grades / Textbook Companies | Pa. Total | | | | N.J. | | | | Del. | | | | All States Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 |
| Harper & Row, Inc. | | 6 | 5 | 7 | | 1 | | 5 | 1 | 2 | 1 | 1 | 1 | 9 | 6 | 13 |
| Basic Reading Program | 2 | 4 | 5 | 3 | | | | | | | | | 2 | 4 | 5 | 3 |
| Reading Basics | 3 | | 3 | | | 1 | | | | | | | 3 | 1 | 3 | |
| Reading Plus | 3 | | | | | | | | | | | | 3 | | | |
| Others | 5 | 3 | | | | 3 | | | 2 | | | | 7 | 6 | | |
| Unspecified | | | | | | | | | | | | | | | | |
| Holt, Rinehart & Winston, Inc. | 15 | 11 | 18 | 23 | 5 | 4 | 4 | 8 | 5 | 7 | 2 | 2 | 25 | 22 | 24 | 33 |
| The Holt Reading Program | | | | | | | | | | | | | | | | |
| Houghton Mifflin Co. | | | | | | | | | | | | | | | | |
| Houghton Mifflin Reading | 6 | 8 | 4 | 1 | 5 | 3 | 1 | 5 | 3 | 3 | 1 | | 14 | 15 | 6 | 6 |
| Series | 8 | 9 | 12 | 10 | 12 | 9 | 8 | 12 | 1 | 3 | 2 | 1 | 21 | 21 | 22 | 23 |
| Houghton Mifflin Readers | | | | | | | | | | | | | | | | 2 |
| Action Series | | 1 | | 2 | | | | | | | | | | 1 | | 2 |
| Unspecified | | | | | | | | | | | | | | | | |
| J.B. Lippincott Co. | 12 | 11 | 6 | 6 | 12 | 14 | 11 | 10 | | | | | 24 | 25 | 17 | 16 |
| Laidlaw Bros. | 3 | 5 | 4 | 3 | | | | | | | | | 3 | 5 | 4 | 3 |
| The Laidlaw Reading Program | | | | | | | | | | | | | | | | |
| Lyons & Carnahan, Inc. | | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 2 | 2 |
| Young America Reading Program | | | | | | | | | | | | | | | | |
| The MacMillan Publishing Co. | 9 | 9 | 8 | 3 | 3 | 4 | 5 | 5 | 1 | 1 | 2 | 2 | 13 | 14 | 15 | 10 |
| Series r | | | | | 5 | | | | | | | | 5 | | | |
| Worlds of Wonder | 2 | 9 | 5 | 5 | 1 | 9 | 4 | | | | | | 3 | 18 | 9 | 5 |
| Reading Program | 2 | 4 | | | 3 | 6 | | | | | | | 5 | 10 | | |
| The Bank Street Readers | 4 | 1 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 1 | | | 8 | 4 | 3 | 5 |
| Unspecified | | | | | | | | | | | | | | | | |

| States/Grades / Textbook Companies | Pa. Total | | | | N.J. | | | | Del. | | | | All States Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 |
| McGraw-Hill Book Co. | | | | | | | | | | | | | | | | |
| Sullivan Programmed Reading | 2 | 2 | | | | | | | 2 | 1 | | | 4 | 3 | | |
| Unspecified | | 1 | 1 | | 2 | 3 | | 1 | | | | | 2 | 4 | 1 | 1 |
| Modern Curriculum Press Inc. | 1 | 1 | | 2 | | | | | | | | | 1 | 1 | | 2 |
| New Dimensions in Education, Inc. | | | | | | | | | | | | | | | | |
| Alpha One | 2 | | | | | | | | | | | | 2 | | | |
| Open Court Publishing Co. | | | | | | | | | | | | | | | | |
| Basic Readings | 13 | 11 | 3 | 1 | 10 | 6 | 6 | 5 | 1 | 1 | 1 | | 24 | 18 | 10 | 6 |
| Palo Alto | 1 | 2 | | | | | | | | | | | 1 | 2 | | |
| Rand-McNally & Co. | | | | | | | | | | | | | | | | |
| Discovering Phonics | 1 | | 2 | | | | | | | | | | 1 | | 2 | |
| Reading Program | | | | | | | | | | 3 | | 1 | | 3 | | 1 |
| Unspecified | | | | | | | | 2 | | | | | | | | 2 |
| Scholastic Book Services | | | | | | | | | | | | | | | | |
| Individualized Reading Program | | 1 | 1 | 1 | | | | 1 | | | | | | 1 | 1 | 2 |
| Science Research Associates | | | | | | | | | | | | | | | | |
| Phonics Series | 1 | | | 1 | | | | | | | | | 1 | | | 1 |
| Distar | 1 | 1 | | | 4 | 2 | | | | | | | 5 | 3 | | |
| Reading Lab | | | | 1 | | | 3 | 2 | | | | | | | 3 | 3 |
| Unspecified | | | 1 | 2 | | | 3 | 4 | | | | | | | 4 | 6 |

| States/Grades / Textbook Companies | Pa. Total | | | | N.J. | | | | Del. | | | | All States Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 | 1 | 3 | 4 | 6 |
| Scott, Foresman & Co. | | | | | | | | | | | | | | | | |
| Reading Systems | 11 | 11 | 10 | 9 | 5 | 5 | 7 | 4 | 4 | 4 | 2 | 1 | 20 | 20 | 19 | 14 |
| Reading Unlimited | 4 | 3 | 2 | 3 | 4 | 5 | 3 | 5 | | 1 | 1 | | 8 | 9 | 6 | 8 |
| Basics in Reading | 3 | 2 | 3 | 5 | | | | | | | | | 3 | 2 | 3 | 5 |
| Open Highways | 1 | 3 | 11 | 9 | | | | | | | 2 | | 1 | 3 | 13 | 9 |
| New Basic Readers | 1 | | | 3 | | | 1 | | | | | | 1 | | 1 | 3 |
| Others | | 3 | 8 | 3 | 1 | | 4 | 4 | | | | | 1 | 3 | 12 | 7 |
| Unspecified | 5 | 4 | 3 | 5 | 1 | | | 3 | | | | | 6 | 4 | 3 | 8 |
| Others | 6 | 7 | 10 | 14 | 7 | 8 | 13 | 8 | 1 | | 1 | | 13 | 16 | 24 | 22 |

Alphabetical Listing of Textbook Companies

Allyn and Bacon, Inc.
American Book Co.
Barnell Loft, Ltd.
Cambridge
Charles E. Merrill Publishing Co.
The Economy Co.
Educational Developmental Laboratories, Inc.
Ginn & Co.
Globe Book Company, Inc.
Harcourt Brace Jovanovich
Harper & Row, Inc.
Holt, Rinehart & Winston, Inc.
Houghton Mifflin Co.
J.B. Lippincott Co.
Laidlaw Bros.
Lyons & Carnahan, Inc.
The MacMillan Publishing Co.
McGraw-Hill Book Co.
Modern Curriculum Press Inc.
New Dimensions in Education, Inc.
Open Court Publishing Co.
Palo Alto
Rand-McNally & Co.
Scholastic Book Services
Science Research Associates, Inc.
Scott, Foresman & Co.

Appendix E:

Standardized Tests Reported in Use

Appendix E

Annual Use of Standardized Reading Achievement Tests

| Test Name | Percent of Teachers Responding | | | | |
|---|---|---|---|---|---|
| | Grade** | | | | Total |
| | 1 | 3 | 4 | 6 | |
| California Achievement Test (CAT) | 28.6 | 22.3 | 26.2 | 19.3 | 24.1 |
| Comprehensive Tests of Basic Skills (CTBS) | 7.7 | 10.3 | 11.8 | 10.0 | 9.9 |
| Iowa Tests of Basic Skills (ITBS) | 6.6 | 9.2 | 8.9 | 10.7 | 8.9 |
| Metropolitan Achievement Tests (MAT) | 24.5 | 14.4 | 16.2 | 16.3 | 17.8 |
| SRA Achievement Series (SRA) | 2.9 | 3.1 | 2.6 | 3.3 | 3.0 |
| Stanford Achievement Test (SAT) | 13.2 | 19.5 | 17.7 | 13.3 | 16.0 |
| Other | 16.5 | 21.2 | 16.7 | 27.1 | 20.3 |

N=1106
**$p$ <0.01

Appendix F:

Tables

Appendix F

Table II-8a

Frequency of Assigning Reading
Homework: Reading Text, Story Books, etc.

| Grade* | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| 1 | 17.5 | 25.5 | 15.6 | 8.6 | 17.8 | 15.0 |
| 3 | 13.9 | 24.1 | 19.0 | 9.5 | 22.5 | 11.1 |
| 4 | 11.2 | 33.2 | 16.9 | 6.8 | 22.4 | 9.5 |
| 6 | 12.0 | 33.9 | 18.7 | 8.8 | 16.6 | 9.9 |

N=1220
*$p$ <0.05

Table II-8b

Frequency of Assigning Reading
Homework: Workbooks, Dittos, etc.

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| 1 | 11.3 | 22.4 | 11.0 | 11.3 | 23.9 | 19.9 |
| 3 | 9.8 | 27.8 | 17.1 | 11.1 | 23.7 | 10.4 |
| 4 | 6.1 | 37.6 | 14.6 | 7.1 | 23.7 | 10.8 |
| 6 | 7.8 | 43.8 | 14.5 | 7.4 | 17.3 | 9.2 |

N=1220
**$p$ <0.01

Appendix F

Table II-8c

Frequency of Assigning Reading
Homework: Word or Vocabulary Study

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| 1 | 32.8 | 30.7 | 10.4 | 3.7 | 8.9 | 13.5 |
| 3 | 15.5 | 30.1 | 17.1 | 10.8 | 17.1 | 9.5 |
| 4 | 15.3 | 40.3 | 17.3 | 6.4 | 11.5 | 9.2 |
| 6 | 12.4 | 48.4 | 17.0 | 4.2 | 10.6 | 7.4 |

N=1220
**$p$ <0.01

Table II-8d

Frequency of Assigning
Reading Homework: Research Projects

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| 1 | 0.0 | 2.5 | 11.7 | 11.3 | 40.2 | 34.4 |
| 3 | 1.3 | 4.1 | 29.1 | 27.5 | 22.5 | 15.5 |
| 4 | 1.0 | 7.1 | 33.2 | 27.1 | 15.9 | 15.6 |
| 6 | 1.4 | 4.2 | 39.2 | 29.0 | 13.8 | 12.4 |

N=1220
**$p$ <0.01

Appendix F

Table II-8e

Frequency of Assigning Reading
Homework: Creative Arts Projects

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Daily | 1-3 times a week | 1-3 times a month | Less than once a month | Never | |
| 1 | 1.5 | 4.9 | 13.5 | 18.1 | 29.4 | 32.5 |
| 3 | 0.9 | 5.1 | 26.9 | 24.4 | 24.1 | 18.7 |
| 4 | 1.7 | 7.5 | 31.2 | 25.8 | 20.3 | 13.6 |
| 6 | 0.4 | 5.7 | 30.7 | 32.5 | 16.3 | 14.5 |

N=1220
**$p$ <0.01

Appendix F

Table III-8a

Provisions for Student Self-Management:
Students Choose Own Instructional Activities

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less Than Once | Once or Twice | Three or Four Times | Five or More | |
| 1 | 17.2 | 14.4 | 26.4 | 14.7 | 19.6 | 7.7 |
| 3 | 18.4 | 19.3 | 32.9 | 18.0 | 8.5 | 2.8 |
| 4 | 17.6 | 27.5 | 34.9 | 13.9 | 3.7 | 2.4 |
| 6 | 18.7 | 23.0 | 43.5 | 7.8 | 3.5 | 3.5 |
| Total | 18.0 | 20.8 | 34.1 | 13.8 | 9.2 | 4.2 |

N=1220
**$p$ <0.01

Table III-8b

Provisions for Student Self-Management:
Students Choose Own Instructional Materials

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less Than Once | Once or Twice | Three or Four Times | Five or More | |
| 1 | 23.9 | 16.9 | 24.8 | 12.9 | 12.9 | 3.6 |
| 3 | 25.0 | 18.0 | 32.0 | 13.0 | 8.2 | 3.8 |
| 4 | 19.7 | 28.1 | 31.9 | 11.9 | 4.1 | 4.4 |
| 6 | 21.2 | 24.4 | 40.3 | 7.4 | 3.9 | 2.8 |
| Total | 22.5 | 21.6 | 32.0 | 11.4 | 7.5 | 5.0 |

N=1220
**$p$ <0.01

Appendix F

Table III-8c

Provisions for Student Self-Management:
Students Choose Own Seating

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less Than Once | Once or Twice | Three or Four Times | Five or More | |
| 1 | 23.9 | 12.0 | 12.6 | 7.7 | 36.8 | 7.1 |
| 3 | 32.6 | 12.0 | 16.5 | 7.9 | 28.8 | 2.2 |
| 4 | 33.9 | 16.9 | 14.2 | 6.1 | 27.5 | 1.4 |
| 6 | 33.9 | 16.6 | 14.8 | 7.8 | 24.0 | 2.9 |
| Total | 30.9 | 14.3 | 14.5 | 7.4 | 29.5 | 3.5 |

N=1220
**$p$ <0.01

Table III-8d

Provisions for Student Self-Management:
Students' Own In-Class Behavior

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Times Per Week | | | | | |
| | Never | Less Than Once | Once or Twice | Three or Four Times | Five or More | |
| 1 | 0.9 | 1.8 | 12.6 | 16.3 | 63.2 | 5.2 |
| 3 | 1.6 | 1.6 | 9.8 | 20.3 | 65.5 | 1.3 |
| 4 | 1.7 | 2.7 | 11.5 | 21.4 | 61.4 | 1.4 |
| 6 | 2.1 | 2.5 | 13.8 | 22.6 | 56.2 | 2.8 |
| Total | 1.6 | 2.1 | 11.9 | 20.0 | 61.7 | 2.7 |

N=1220
**$p$ <0.01

Appendix F

Table III-12a

Interpersonal Motivators-Feedback:
Teacher Finds Work to Praise

| Grade** | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Priority (High) | | | | (Low) | |
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | 46.3 | 35.6 | 5.8 | 0.6 | 0.0 | 11.7 |
| 3 | 32.3 | 36.1 | 10.8 | 1.6 | 0.6 | 18.7 |
| 4 | 27.5 | 35.3 | 12.2 | 3.1 | 0.7 | 21.4 |
| 6 | 33.2 | 31.8 | 13.8 | 1.8 | 0.4 | 19.1 |

N=1220
**$p$ <0.01

Table III-12b

Interpersonal Motivators-Feedback:
Teacher Indicates Need for Improvement

| Grade* | Percent of Teachers Responding | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|
| | Priority (High) | | | | (Low) | |
| | 1 | 2 | 3 | 4 | 5 | |
| 1 | 6.7 | 22.7 | 37.4 | 6.1 | 0.0 | 26.7 |
| 3 | 7.0 | 28.2 | 34.5 | 6.0 | 1.3 | 23.1 |
| 4 | 12.9 | 24.1 | 33.2 | 5.8 | 0.3 | 23.7 |
| 6 | 12.7 | 30.0 | 30.4 | 3.5 | 0.7 | 22.6 |

N=1220
*$p$ <0.05

Appendix F

Table III-12c

Interpersonal Motivators-Feedback:
Teacher Gives or Withholds Privileges

| Grade** | Percent of Teachers Responding | | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|---|
| | Priority (High) | | | | | (Low) | |
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 1 | 1.2 | 3.7 | 10.1 | 21.5 | 7.1 | 0.0 | 56.4 |
| 3 | 1.6 | 4.1 | 6.6 | 15.8 | 13.3 | 0.0 | 58.5 |
| 4 | 1.7 | 4.7 | 5.4 | 15.9 | 16.3 | 0.3 | 55.6 |
| 6 | 0.4 | 4.2 | 3.9 | 13.4 | 17.7 | 0.4 | 60.1 |

N=1220
**$p$ <0.01

Table III-12d

Interpersonal Motivators-Feedback:
Teacher Lets Grades Speak for Themselves

| Grade** | Percent of Teachers Responding | | | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|---|---|
| | Priority (High) | | | | | (Low) | |
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 1 | 0.6 | 3.1 | 1.2 | 9.5 | 14.7 | 0.0 | 70.9 |
| 3 | 2.2 | 4.1 | 5.4 | 18.7 | 13.6 | 0.6 | 55.4 |
| 4 | 6.4 | 2.7 | 8.8 | 18.0 | 15.6 | 0.0 | 48.5 |
| 6 | 4.2 | 5.3 | 8.1 | 21.0 | 12.4 | 0.0 | 48.8 |

N=1220
**$p$ <0.01

Appendix F

Table IV-10a

Making Students Aware of Specific Instructional Objectives: Teacher Points Out Objectives

| Grade** | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Frequency | | | | |
| | Almost never use | Seldom use | Frequently use | Almost always use | |
| 1 | 16.6 | 13.5 | 28.2 | 23.6 | 18.1 |
| 3 | 10.4 | 10.1 | 34.2 | 26.6 | 18.7 |
| 4 | 6.1 | 10.8 | 44.7 | 26.8 | 11.5 |
| 6 | 8.1 | 9.5 | 45.2 | 30.0 | 7.1 |
| Total | 10.5 | 11.1 | 37.7 | 26.6 | 14.1 |

N=1220
**$p$ <0.01

Table IV-10b

Making Students Aware of Specific Instructional Objectives: Teacher States and Explains Objectives

| Grade** | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Frequency | | | | |
| | Almost never use | Seldom use | Frequently use | Almost always use | |
| 1 | 9.8 | 11.0 | 27.6 | 38.7 | 12.9 |
| 3 | 6.0 | 10.1 | 36.4 | 39.2 | 8.2 |
| 4 | 4.4 | 11.2 | 41.0 | 35.3 | 8.1 |
| 6 | 3.2 | 11.0 | 42.4 | 38.5 | 4.9 |
| Total | 6.0 | 10.8 | 36.6 | 38.0 | 8.7 |

N=1220
**$p$ <0.01

Appendix F

Table IV-10c

Making Students Aware of Specific Instructional Objectives: Teacher Gives an Example

| Grade** | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Frequency | | | | |
| | Almost never use | Seldom use | Frequently use | Almost always use | |
| 1 | 1.8 | 1.5 | 23.0 | 65.3 | 8.3 |
| 3 | 2.2 | 0.6 | 29.1 | 63.6 | 4.4 |
| 4 | 0.7 | 3.1 | 38.6 | 54.9 | 2.7 |
| 6 | 1.1 | 3.2 | 38.2 | 54.4 | 3.2 |
| Total | 1.5 | 2.0 | 31.9 | 59.8 | 4.8 |

N=1220
**$p$ <0.01

Table IV-10d

Making Students Aware of Specific Instructional Objectives: Reliance on the Printed Material to Make the Objectives Clear

| Grade** | Percent of Teachers Responding | | | | Percent of Teachers Not Responding |
|---|---|---|---|---|---|
| | Frequency | | | | |
| | Almost never use | Seldom use | Frequently use | Almost always use | |
| 1 | 19.0 | 13.8 | 20.9 | 17.8 | 28.5 |
| 3 | 11.1 | 21.8 | 28.2 | 10.8 | 28.2 |
| 4 | 14.9 | 26.8 | 26.1 | 12.2 | 20.0 |
| 6 | 12.7 | 24.4 | 30.4 | 11.7 | 20.8 |
| Total | 14.5 | 21.5 | 26.2 | 13.2 | 24.6 |

N=1220
**$p$ <0.01

Appendix F

Table IV-23a

Grouping of Students for Reading Instruction

First Grade

| GROUPINGS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Approximate Portion of Time per Reading Period | | | |
| | About 1/2[1] | About 3/4 | Almost all | Other |
| Whole class (more than 15 students) | 4.3 | 1.8 | 4.3 | |
| Medium size groups (8-15 students) | 10.1 | 3.0 | 6.4 | |
| Small groups (3-7 students) | 6.8 | 4.6 | 16.9 | |
| Individuals working independently | 10.8 | 3.1 | 6.4 | |
| Divided equally 4 ways | | | | 2.1 |
| Other | | | | 26.4 |

N=326

[1]There is a small overlap among some groups.

Table IV-23b

Grouping of Students for Reading Instruction

Third Grade

| GROUPINGS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Approximate Portion of Time per Reading Period | | | |
| | About 1/2[1] | About 3/4 | Almost all | Other |
| Whole class (more than 15 students) | 6.6 | 1.6 | 4.1 | |
| Medium size groups (8-15 students) | 13.3 | 4.1 | 11.1 | |
| Small groups (3-7 students) | 4.7 | 3.1 | 11.1 | |
| Individuals working independently | 12.8 | 2.5 | 8.9 | |
| Divided equally 4 ways | | | | 1.6 |
| Other | | | | 26.0 |

N=316.

[1]There is a small overlap among some groups.

Appendix F

Table IV-23c

Grouping of Students for Reading Instruction

Fourth Grade

| GROUPINGS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Approximate Portion of Time per Reading Period | | | |
| | About 1/2 [1] | About 3/4 | Almost all | Other |
| Whole class (more than 15 students) | 8.4 | 3.4 | 9.2 | |
| Medium size groups (8-15 students) | 12.1 | 3.4 | 6.1 | |
| Small groups (3-7 students) | 5.8 | 1.7 | 9.2 | |
| Individuals working independently | 18.2 | 2.0 | 7.1 | |
| Divided equally 4 ways | | | | 3.1 |
| Other | | | | 25.8 |

N=295

[1]There is a small overlap among some groups.

Table IV-23d

Grouping of Students for Reading Instruction

Sixth Grade

| GROUPINGS | Percent of Teachers Responding | | | |
|---|---|---|---|---|
| | Approximate Portion of Time per Reading Period | | | |
| | About 1/2 [1] | About 3/4 | Almost all | Other |
| Whole class (more than 15 students) | 12.7 | 3.9 | 11.3 | |
| Medium size groups (8-15 students) | 11.6 | 3.5 | 7.4 | |
| Small groups (3-7 students) | 5.1 | 2.9 | 3.9 | |
| Individuals working independently | 16.0 | 3.6 | 10.2 | |
| Divided equally 4 ways | | | | 1.4 |
| Other | | | | 21.2 |

N=283

[1]There is a small overlap among some groups.

Appendix G:

Teacher Definitions of Mastery

Appendix G

QUESTION #32--DEFINITIONS OF MASTERY

Question #32 from the Questionnaire of A Survey of Classroom Practices in Reading asked teachers what is meant by the word "mastery." A random sample of the responses was taken and sorted into three groups: (1) general definitions are those that are of a heuristic nature and rely upon teacher judgment; (2) numerical definitions are those that use precise numerical values (usually percentages) to determine mastery; and (3) test-oriented definitions - passing criterion-referenced tests, unit tests, teacher-designed tests, etc. They appear on the following pages.

TEACHERS' DEFINITIONS OF MASTERY

I. GENERAL

When work has been done and additional knowledge gained (some children gain mastery), we move on.

Ability to answer most questions correctly in basal reader text.

They have learned all skills taught.

They must demonstrate mastery or working knowledge of vocabulary and skills.

Word recognition, comprehension (main idea, sequence knowledge), anto/synonyms, word meaning, etc.

At least three quarters of the students in a particular group understands 80% of the material being taught.

Students must show they are able to apply what they've learned.

Competence in reading independently, little instruction needed for independent work. High degree of accuracy.

Child, according to ability, must, either through testing, written or oral, be able to understand and implement that skill.

Satisfy criteria.

In the skills area that they are working on, they must reach a certain grade level before moving to next unit.

Have mastered sight vocabulary, phonetic analysis, comprehension work sheets.

Children must be able to recognize and utilize skill, concept, vocabulary, etc., at least 70% of time.

Score of "R" for Ready at end of level.

Acquire a needed skill.

Complete all work I require.

Knowledge that they have knowledge of concepts and ability to apply when needed.

To be able to work independently with the skill.

Demonstrates comprehension through proper utilization of skill in contrived and new situations.

Mastery - fall in competency range area - if one particular needs re-enforced - continue, but reteach and supplement the area of weakness.

Know the skill and apply it.

Satisfactorily pass Unit Tests and do well in Workbooks and Skill Sheets.

At least 50% awareness of the skill or technique in the present skill or unit.

They can easily read and understand this level.

They are able to master a certain number of reading skills.

Have an understanding of the story content - complete the test with 90% accuracy.

Comprehending concepts taught and ability to demonstrate use of those concepts.

Each child must master all the words and skills taught on that particular level.

A certain score must be obtained.

Mastery of words ( recognition and knowledge ) and at least 75 - 85% comprehension. Child not frustrated.

Ability to apply the skill at least 75% of the time.

Student must understand basic concept and meet a standard.

Displays at least average competency with the skills at that level.

Students must demonstrate attainment of skill through use of the skill in decoding words (phonics).

Reasonable achievement beyond previous level.

II. PERCENTAGES

80% (frequently selected by teachers)

95% vocabulary achievement

70%

95%

At least 85% correct on skills.

A child has to perform at a 90% mastery.

80% accuracy 80% of the time.

The student has about 85% comprehension or grasp of content.

Text definition - usually 85-90% correct.

Mastery learning as described by Bloom consists of 80-90% mastery by entire class.

75-80%

Perform better than 70%.

98-99%

84% of word recognition; 80% of skills.

80-90% accuracy on test.

III. TESTS

80% on Wisconsin Design tests. 80% on End of Book competency tests.

Must pass on End of Level test with a score of 40 or better.

Scoring within a range required in the diagnostic test.

100% of the students show at least 80% consistency on teacher and basal material tests.

Mastery as indicated by C.R.T. and Ginn 360 End of Book tests.

Passing basal text accordingly to Mastery test requirements.

Do adequately in unit tests.

Obtain critical score or better on test from basal reader series.

I feel they must have obtained a B grade or higher on a test of that skill or unit.

Have knowledge of words at each level and have demonstrated their ability to achieve the skills for each level. The skills are assessed by means of pre and post tests for levels 3 to 9.

Check results of the Holt Unit Tests - children should master skills; if not they receive prescription dittos.

Able to demonstrate by teacher made tests.

Being about to score a satisfactory percentage on a mastery test.

Have passed a post level test.

The students must achieve a score of 70% or better on a teacher-developed test based on skills and materials studied.